

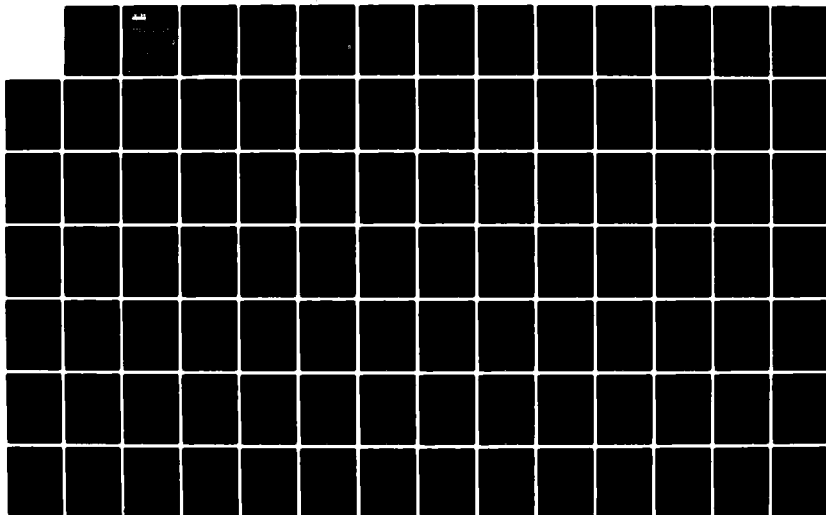
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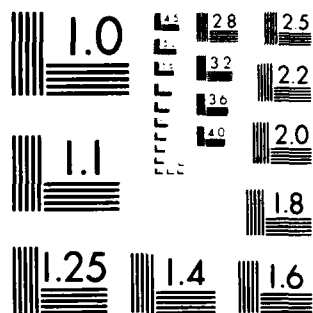
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REPORT JTCG/AS-81-8-005



# BENCHMARK FOR THE ASALT PROGRAM; ASSESSMENT OF SURVIVABILITY AGAINST LASER THREATS

Frederick J. Steenrod  
John E. Much

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September 1981

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**JTCG/AS-81-S-005**

## **FOREWORD**

This report presents the results of research performed under Naval Weapons Center, China Lake, California Contract N00123-80-ID-0033.

The work was sponsored by the JTCG/AS and conducted under the direction of the survivability Assessment Subgroup as Project SA-001.

The contractor was Armament Systems, Inc.

The authors would like to acknowledge the assistance of Carol A. Gillespie, Code 3381, of the Naval Weapons Center, in the understanding and documentation of the ASALT programs.

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The benchmark run of the ASALT Computer Program using data for an F-18 aircraft target is documented in this report. Also described in this report, are several other computer programs that are useful in assembling data for input to the ASALT Program. Copies of the input and output files from the benchmark process are included, so that the report serves as an example of the execution of the ASALT Program and the programs which precede it.

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## SECTION I

### INTRODUCTION

Due to improvements in laser and tracking technology, high-energy lasers have become a potential threat to the survivability of combat aircraft. A method for evaluating the effectiveness of a ground-based laser weapon system against an aircraft is provided by the computer program, ASALT, Assessment of Survivability Against Laser Threats (Reference 1). This report is the documentation for a benchmark run of the ASALT Program which has been completed using data for a typical fighter aircraft. In order to assemble realistic data, the benchmark process utilized a sequence of several other computer programs also described in this report.

### ASALT DESCRIPTION

The ASALT Program is used to evaluate the effectiveness of a high-energy laser against an aircraft. The laser weapon system is located in a fixed position and is described by a flux emission function, aiming errors caused by jitter, and slewing limits for the tracking mechanism. The target aircraft is comprised of components which are linked using fault tree structures. Each component is characterized by a set of presented areas which vary with different aspect angles, and a Pk function which increases with rising levels of accumulated irradiation. The aircraft flies a path with designated

"can engage" and "cannot engage" intervals determined by using the Engagement Model (Reference 2). The ASALT Program also has an atmospheric model used to determine the power degradation of the laser beam due to interaction with molecules in the air, or with an optional smoke corridor.

Damage to each component is dependent on the total amount of energy that can be expected to accumulate on the component. The probability of hitting a component is computed by determining the rectangular presented area of the component, computing the total standard deviations caused by aiming errors and jitter, and integrating a Gaussian probability density function, centered at the user-defined aim point, over the component presented area. The probability of hit multiplied by the time interval between program iterations results in the expected time duration that the laser beam center is focused on the component. The expected time multiplied by the attenuated beam power results in the amount of energy expected to reach the component during the time interval. The total energy reaching each component is summed over all time intervals to obtain the total expected energy on each component. The component Pk is then computed using the user-defined Pk functions with the total expected energy as the argument. Subgroup and total target Pk's are computed using the target fault tree description to determine the component interrelationships.

The ASALT Program line printer output includes a description of the input parameters, an optional time trace showing the total target Pk's at regular time intervals, and an end-of-run damage summary which contains the final Pk's for the components, subgroups, and the total target. The ASALT Program requires approximately  $140,000_8$  ( $49152_{10}$ ) words of addressable memory (HP 3000 Computer), and makes use of two input files and two output files.

#### ASALT INPUT REQUIREMENTS

The ASALT Program requires two input files as shown in Figure 1-1, a Flight Path File and an ASALT Data Deck. A detailed description of both input files is given in Section III of the ASALT documentation (Reference 1). Sections II and III of this report are used to describe a sequence of several other computer programs which can be used to assist in assembling these data.

The tape symbol on the left side of Figure 1-1 represents the Flight Path File, which is a binary sequential file that contains data describing the aircraft position and attitude as it moves through the scenario. Each record in this file contains a flag used to indicate whether or not the aircraft may be engaged during that time step. The ASALT Program will not simulate laser firing unless the flag permits engagement. In this way such factors as clear line-of-sight or acquisition envelopes can directly affect the results

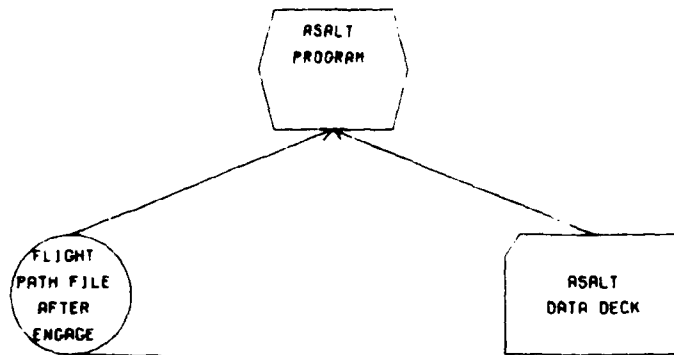


FIGURE 1-1. ASALT Input Requirements.

from the ASALT Program. Section II of this report is used to describe the techniques employed to generate the Flight Path File.

The card shaped box in Figure 1-1 represents the ASALT Data Deck which contains the values necessary to describe the laser weapon system, the target aircraft, and the atmosphere around the laser. Since some parameters in the ASALT Data Deck can be assembled only by users, this file is in an easily modified card image format. Section III of this report is used to describe the method for assembling these data.

#### REPORT ORGANIZATION

This report is used to document the procedure utilized for the ASALT benchmark run and serves as an example of an ASALT execution. Copies of several input and output files from the benchmark run described in this report are included

in Appendix A. Section II, Flight Path File Assembly, contains a description of the method for creating the Flight Path File and is used to describe Figure A-1, a copy of the output from the Engagement Model run used in the benchmark procedure. The sequence used to assemble the ASALT Data Deck is described in Section III, ASALT Data Deck Assembly. Listings in the Appendix referenced in Section III include a copy of the final ASALT Data Deck used for the benchmark run as well as listings of other programs employed in the data deck assembly procedure. Section IV is used to describe a copy of the line printer output from the ASALT benchmark run and a discussion of that run. Appendix A also contains a copy of the source code for the VAMERGE Program which is the only undocumented program in the sequence utilized in this benchmark procedure. Following the appendix, is a page of references for the other programs used in the benchmark procedure.

Input files are described as being either binary tape files which consist of records, or card decks which consist of formatted cards. All of these input files are read sequentially. The distinction between tape files and card decks is used to emphasize whether files are read by executing unformatted or formatted READ statements, respectively. The words "card" and "tape" do not imply any specific device type restrictions.



## STRENGTHS AND WEAKNESSES

The benchmark exercise revealed a few weak areas that were corrected with minor programming changes. These problems and their corrections follow:

1. The QKLOOK programs as documented in Reference 4 are limited to a maximum of 498 components in the aircraft model. This limit had to be increased to 1398 components for the fighter aircraft model used in this report. The procedure for increasing this limit is clearly outlined in Appendix B of the QKLOOK documentation (Reference 4).
2. The QKLOOK program, QKPK, could abort on some computers with a small word size, especially with a large target such as the F-18. By making the variables, TNOW and TUSED, double precision the problem can be prevented.

One of the strongest points of the ASALT benchmark procedure is that a fairly complex network of programs fit together very well. Only one final step requires manual modification of a file produced by one program before being used by the next. Other strong points are the readable line printer output from the programs, and the thorough set of documentation that exists for the programs used here.

SECTION II  
FLIGHT PATH FILE ASSEMBLY

The Flight Path File contains data used to describe the position and attitude of the aircraft as it moves through the scenario. Each record on this file contains a flag which indicates whether or not the aircraft can be engaged. One way of generating this input file is to use the FLYGEN Program (Reference 3) to build a flight path and then use the ENGAGEMENT Model (Reference 2) to determine the engagement intervals. Figure 2-1 is used to depict the addition of these programs to the diagram depicted in Figure 1-1.

The Engagement Model is used to evaluate any combination of eight different engagement conditions which influence a ground weapon attempting to engage an aircraft. The eight engagement conditions are presented in Table 2-1. The engagement conditions selected by the user are specified in the formatted input for the Engagement Model, represented in Figure 2-1 by the card shaped box labeled "ENGAGEMENT CONDITIONS". The two tape symbols in Figure 2-1 represent the binary Flight Path File before and after the Engagement Model has been used to determine the intervals for engagement. The exact format and contents of both input files for the Engagement Model are presented in Section V of Reference 2.

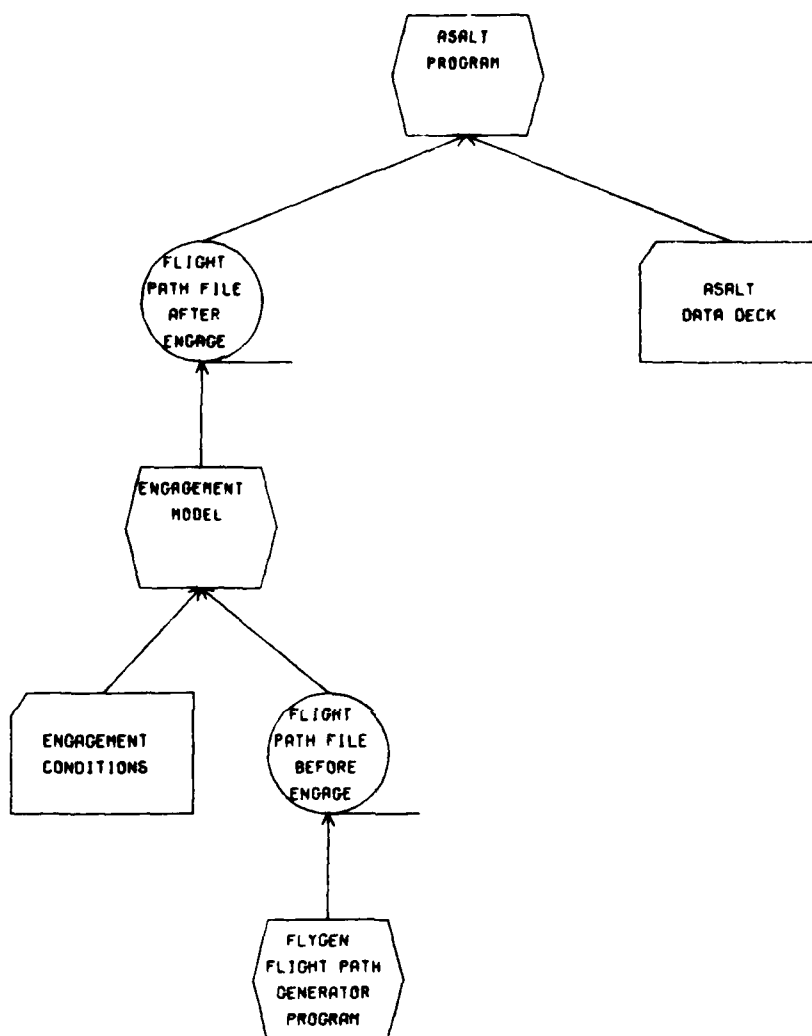


FIGURE 2-1. Flight Path File Assembly.

The Engagement Model can use any flight path file in the proper format. Program FLYGEN produces a file in the correct format but almost any flight path generating program could be modified to perform this task. If a flight path

TABLE 2-1. Engagement Conditions for the Engagement Model.

## 1. FIELD OF FIRE

This test compares the weapon-to-target azimuth angle with user specified limits. A 360-degree field of fire is allowed.

## 2. MINIMUM RANGE

The range from the weapon to the aircraft is compared with the minimum range specified by the user.

## 3. MAXIMUM RANGE

The range from the weapon to the aircraft is compared with the maximum range defined by the user.

## 4. ACQUISITION ENVELOPE

An acquisition envelope may be defined for the weapon in a tabular form. The table contains maximum acquisition ranges as a function of azimuth and elevation from the weapon location. The model is used to perform a double interpolation of values from the table and compare the interpolated maximum range with the weapon-to-aircraft range.

## 5. STATISTICAL TERRAIN PROBABILITY OF CLEAR LINE-OF-SIGHT

A probability of clear line-of-sight may be computed in one of two ways:

- a. A probability of clear line-of-sight can be interpolated from values in a table containing probabilities as a function of range and altitude from the weapon location.
- b. A table listing boundary ranges and altitudes as a function of azimuth may be used. In this method the weapon-to-target azimuth is used to interpolate the boundary range and altitude values from the table. The probability of clear line-of-sight is 1.0 if the actual range is less than the boundary range, or if the actual elevation is greater than the minimum elevation computed from the boundary range and altitude.

The probability of clear line-of-sight is compared with a user-specified minimum to determine when this engagement condition is satisfied.

## 6. DIGITAL TERRAIN CLEAR LINE-OF-SIGHT

A direct access input file containing terrain altitudes at a user-specified grid interval may be used to test for terrain masking. The weapon-to-target line-of-sight altitude is compared with the terrain altitude at every horizontal and vertical grid line intersection. A clear line-of-sight exists if the terrain altitude is less than the line-of-sight altitude at every intersection.

## 7. RADAR ACQUISITION AND COUNTERMEASURES

An acquisition radar for the ground weapon may be defined with radar parameters and a target radar cross section array which varies with azimuth and elevation look-angles. Additionally, jamming and/or chaff countermeasures may be employed to nullify the radar acquisition capability.

## 8. IR LOCK-ON

An IR lock-on range equation may be used to test the lock-on capabilities of such a device. This test allows the user to make use of a large set of atmospheric transmission factors derived by previous study, or to define a unique set of transmission factors.

file which bypasses the Engagement Model is used as input for the ASALT Program the results will be based upon the assumption that the laser beam is able to engage the aircraft during the entire flight path.

The execution of the Engagement Model used for this benchmark is the same as part of the sample problem described in the ENGAGE documentation (Reference 2). Figure 2-2 is a contour map which shows the terrain for the scenario, the laser location, and the aircraft flight path. The solid lines on the flight path represent intervals during which the aircraft can be engaged and the dashed lines represent intervals during which the aircraft cannot be engaged by the laser weapon system. The line printer output for that execution of the Engagement Model is Shown in Figure A-1.

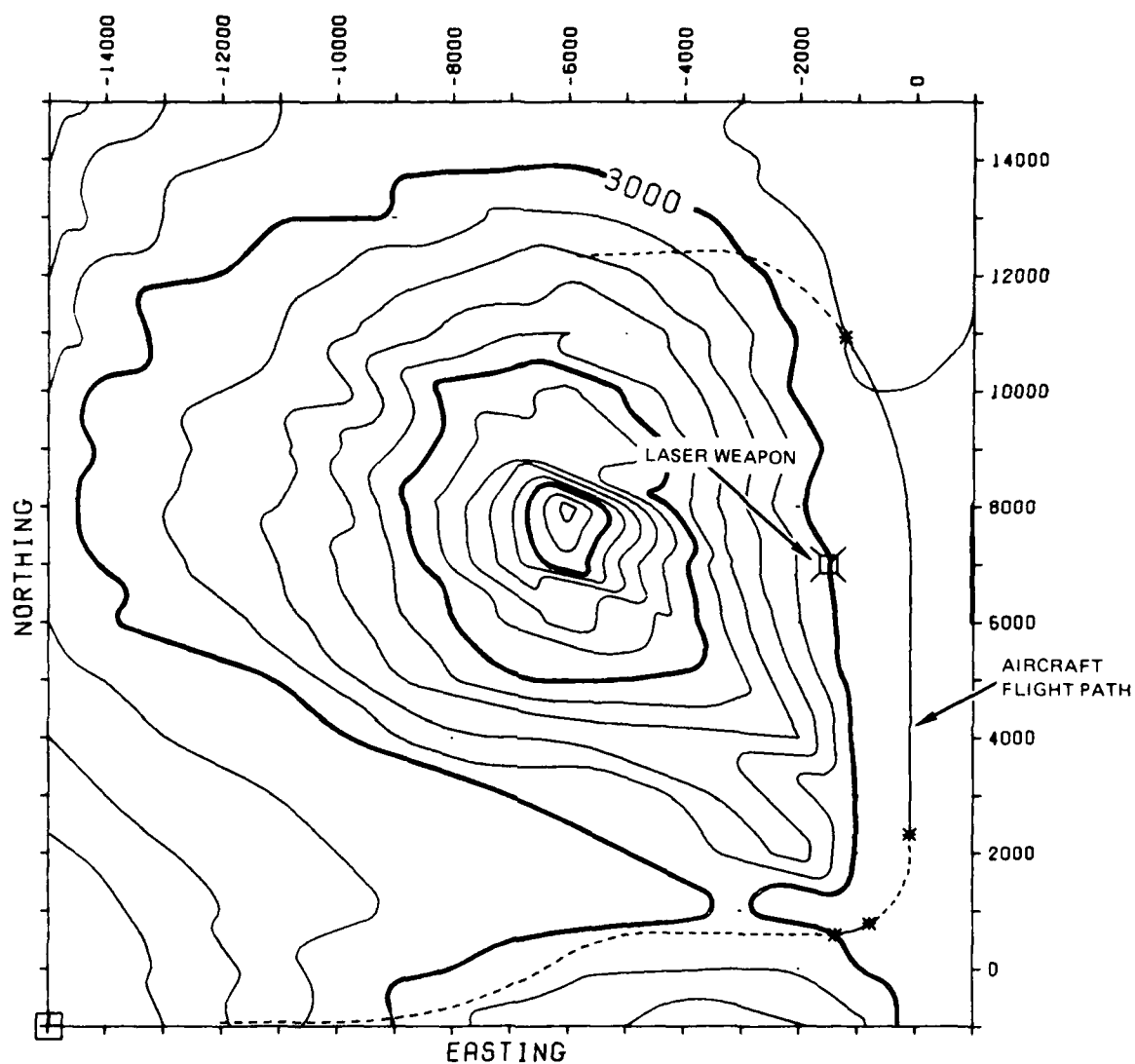


FIGURE 2-2. Engaged Flight Path Intervals for ASALT Benchmark.

## SECTION III

## ASALT DATA DECK ASSEMBLY

The ASALT Data Deck contains the values necessary to describe the laser weapon system, the target aircraft, and the atmosphere around the laser. A major portion of this input is the set of cards used to specify the name, location, presented areas, and Pk functions for each aircraft component. A sequence of four steps which can be used to assemble this component information into the ASALT Data Deck is presented in Table 3-1. Figure 3-1 is used to show this sequence of steps added to the diagram from Figure 2-1. The sequence added in Figure 3-1 includes a shot line generating program such as FASTGEN (Reference 5), followed by several executions of the QKLOOK Programs (Reference 4), and finally the VAMERGE Program which is used to combine the QKLOOK output into the ASALT Data Deck. The dashed line between the VAMERGE PROGRAM box and the ASALT DATA DECK box in Figure 3-1 is used to indicate that the ASALT Data Deck must be completed manually by the user. This completion step includes specifying the laser weapon location and the aircraft fault tree structure. The next four subsections are used to discuss the four steps in assembling the ASALT Data Deck.

TABLE 3-1. Steps for Assembling the  
ASALT Data Deck

---

1. Generate target shot line descriptions at 13 views.
2. Generate target vulnerable area tables at 26 views.
3. Merge the 26 vulnerable area tables.
4. Manually complete the ASALT Data Deck

#### GENERATE TARGET SHOT LINE DESCRIPTIONS AT 13 VIEWS

The QKLOOK Programs require a target shot line description as input. The format and contents of this file are described in Section V of the QKLOOK documentation (Reference 4) under the subheading, QKPK Binary Input File. Figure 3-1 depicts this file as the output from the FASTGEN Program (Reference 5). Other possibilities for this step include Program SHOTGEN or Program MAGIC (Reference 6) followed by Program CONMAG from the QKLOOK set of programs. The final ASALT Data Deck requires data from 26 aspect angles around the aircraft but the reverse option in the QKLOOK Programs can be used so that shot line descriptions at only 13 views are required for this step.

#### GENERATE TARGET VULNERABLE AREAS AT 26 VIEWS

This is the longest step in preparing input data for an ASALT run because it involves the repeated execution of the QKLOOK Programs. These programs are used to evaluate the vulnerability of a target to high-energy laser irradiation at one constant aspect angle. Before this step could be started



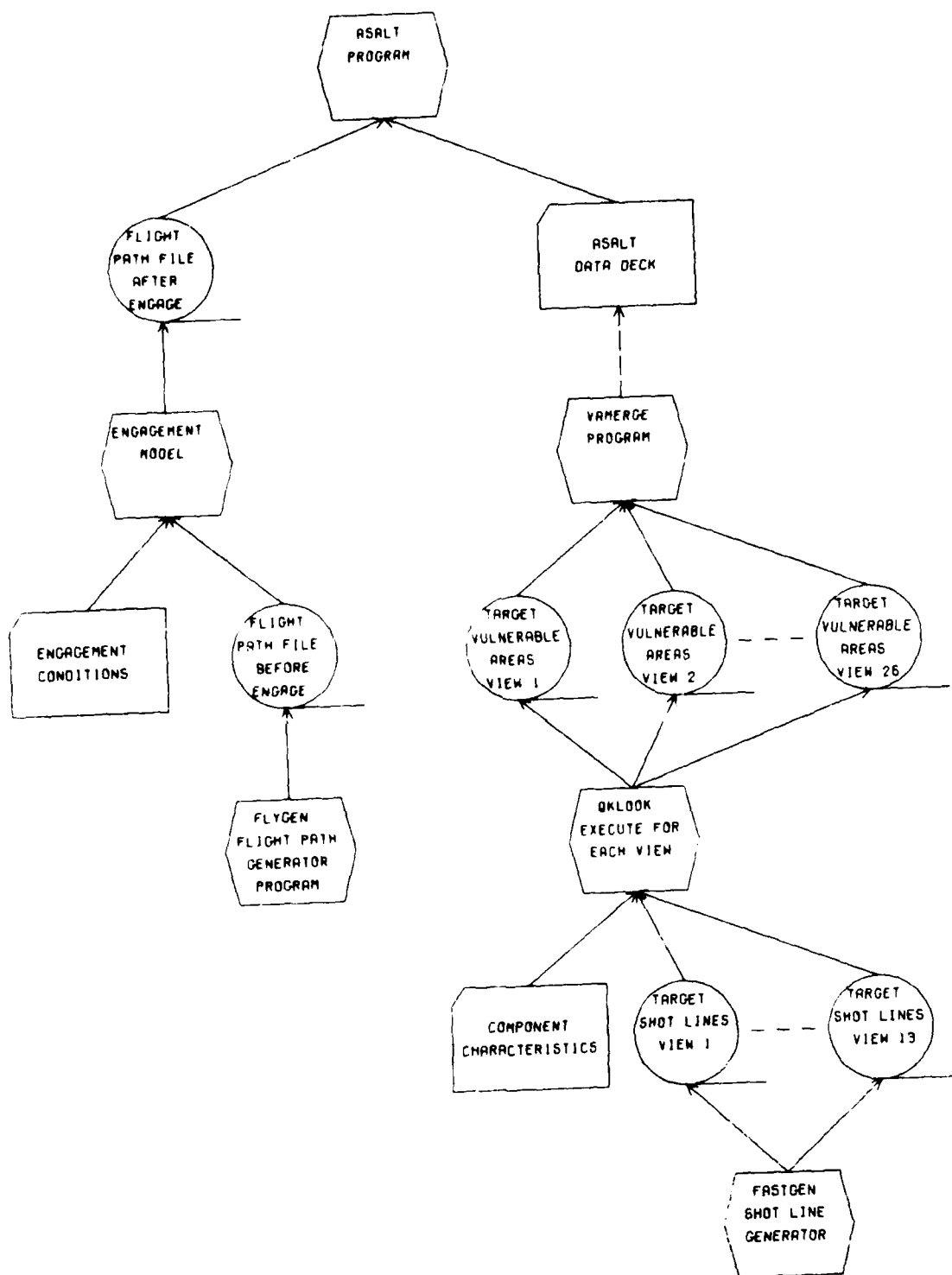


FIGURE 3-1. ASALT Data Deck Assembly

for the fighter aircraft model used in this benchmark problem, two changes were required in the QKLOOK Programs: the maximum number of components was increased from 498 to 1398 using the code changes outlined in Appendix B of the QKLOOK documentation (Reference 4), and Program PEAKAY was modified so that PEAKAY Binary Output FILE 3 was kept separately from the other output files which were not needed.

The QKLOOK Programs require as input, a formatted data deck which contains the component characteristics for the target aircraft, and a binary target shot line description file. The card shaped box in Figure 3-1 labeled "COMPONENT CHARACTERISTICS" represents the QKLOOK formatted input deck. A copy of this input file for the benchmark problem is presented in Figure A-2. Since the component characteristics do not change with different aspect angles, the same input deck is used for the different views for each execution of the QKLOOK Programs. The QKLOOK Program, PRERD, should be executed once to check for possible errors in the QKLOOK formatted input deck. The binary shot line description files are the 13 files produced by executing the FASTGEN Program in the preceding step. Notice that QKLOOK Program, CONMAG, is not needed in this case because the shot lines files from FASTGEN are in the proper format for QKLOOK. Each target shot line file is used twice as QKLOOK input, once without the reverse flag set as shown in Figure A-2, and once with

the reverse flag set on Card QK2. Since each of the 13 target shot line files is used twice as input for QKLOOK Program, QKPK, a total of 26 target vulnerable area files are produced.

Only data for critical components are contained in the vulnerable area files even though the entire target model is considered when computing the burn-through times. Therefore the vulnerable areas for the critical components are numbers which reflect the shielding effects of all other components. The ASALT Program does not need to handle the large complete target model but rather only the smaller set of critical components.

An alternative in this step is that the vulnerable areas for the systems of components computed by the QKLOOK Program PEAKAY and written on PEAKAY Binary Output, File 4, could be used for the vulnerable area files. This alternative would require some changes in Program VAMERGE and provide a different level of answers in the ASALT output.

#### MERGE THE 26 VULNERABLE AREA TABLES

Program VAMERGE was written for the benchmark procedure due to the need for a method to quickly and accurately combine the data from several QKLOOK runs. Appendix A of this manual contains a copy of the VAMERGE source code (Figure A-7). The current version of this program requires 31 different input files. The input files read from Logical Units #1,

#2, and #3 are three target shot line files from Program FASTGEN at three orthogonal views, and are used in Subroutine GETXYZ to determine the locations of the critical components in the Aircraft Coordinate System. The number of critical components is read from Logical #5. This value is necessary to properly read the target vulnerable area files as well as the component name file, and can easily be found in the output from the QKLOOK Program PEAKAY. The input file read from Logical Unit #7 is used in Subroutine NAMES to assign an eight character name for each critical component. The 26 target vulnerable area files from the QKLOOK run are read from Logical Units #11 through #36.

Two output files are produced by executing the VAMERGE Program. A lot of useful information is presented in the standard line printer output from Logical Unit #6. The output file that can be modified to be used as the ASALT Data Deck is written on Logical Unit #4. Figure A-3 is a copy of the VAMERGE output written on Logical Unit #6 for the benchmark problem. The first 52 pages of Figure A-3 are an echo of the vulnerable areas at each of the 26 views computed by executing the QKLOOK programs.

Pages 53 and 54 of Figure A-3 contain the coordinates of the critical components in the Aircraft Coordinate System as computed in Subroutine GETXYZ. Note that components with coordinate values of .00 and the value "0" in the sample

column are components not intersected in any of the three shot line files. The user must manually provide accurate coordinates for those components before running ASALT.

Pages 55 through 69 of Figure A-3 contain the values for the component presented areas and widths at the 26 look-angles in a readable form. These values were read from the 26 target vulnerable area files in square feet and feet and converted to square meters and meters before being printed during execution of the VAMERGE program. The last two pages, 70 and 71, of Figure A-3 contain the component Pk functions computed during execution of Program VAMERGE. The component Pk functions were computed by dividing the vulnerable area at each time increment by the presented area from the target vulnerable area files, and averaging the Pk's computed at each of the 26 views. The output shown in Figure A-3 is intended to be readable and useful to analysts. The same values are written in the format required for the ASALT Data Deck on Logical Unit #4. Figure A-4 is a copy of this output which requires a few changes before it can be used as the ASALT Data Deck.

#### MANUALLY COMPLETE THE ASALT DATA DECK

The final step required before running the ASALT Program is to finish the ASALT Data Deck. Most of this file has been completed by executing Program VAMERGE. Figure A-5 is a copy of the final corrected ASALT Data Deck. One method of doing

this task is to look at the ASALT Data Deck Setup in Figure 3-1 of Reference 1 and the card description forms in Section III of Reference 1 to verify the validity of the values provided by the VAMERGE program. Normally, Card Types 3, 4, 5, 13, 14, and 15 are correct. The rest of the cards must reflect values the user wants in the scenario. The weapon location and coordinate system reference point on Card 2 should be copied from the Engagement Model output (see Figure A-1). Any components with invalid coordinates on Cards 13 can be found by scanning the critical component coordinates in the VAMERGE line printer output (see Figure A-3). For some of the other cards, reasonable values are provided by the VAMERGE Program and may not require changes. The last several cards required in the ASALT Data Deck are Card Type 17, and are used to define the aircraft fault tree structures. These cards must be added by the user as indicated by the note printed at the end of the VAMERGE output in Figure A-4. Table 3-1 of Reference 1 contains a set of helpful rules for assembling the fault tree descriptions.

#### SECTION IV

##### ASALT BENCHMARK RUN

After the Flight Path File has been built as described in Section II, and the ASALT Data Deck assembled as described in Section III, the ASALT Program can be executed. The Flight Path File is read from Logical Unit #10 and the ASALT Data Deck is read from Logical Unit #5. Figure A-5 is a copy of the ASALT Data Deck used for the benchmark run. The ASALT line printer output from the benchmark run is shown in Figure A-6. Section IV in the ASALT Documentation (Reference 1) contains a description of this output.

Aircraft fault trees were defined for two kill categories, K-KILL and M ABORT for the benchmark run. The K-KILL fault tree consists of a few subgroups with redundant components with the majority of the fault tree containing singly vulnerable components. For the M ABORT fault tree, the aircraft model consists of all critical components in one singly vulnerable arrangement. Pages 3 through 15 of Figure A-6 contain these fault tree diagrams. Seven aim points are used in the benchmark run with each aim point designated to be near a particular set of components. Aim points 5 and 6 are associated with the highest Pk values in this benchmark run.

Users can spend a substantial amount of time and effort in preparing for one ASALT run. However, after the initial

set of input is assembled, a lot of variables can be evaluated without repeating the complete procedure again. For example, different aircraft fault tree structures can be compared by simply rerunning the ASALT Program with the modified fault tree input. A new set of engagement conditions can easily be specified for another execution of the Engagement Model, providing a different scenario for analysis by running ASALT. Different aim points are easily specified in the ASALT Data Deck, and may reveal more sensitive spots in the aircraft design. All of these can be evaluated with small changes to the input files and rerunning only one or two programs in the sequence.



APPENDIX A  
COMPUTER PRINTOUTS

In order to provide continuity in the documentation of the ASALT benchmark, copies of all referenced computer printouts are presented in this appendix. Each printout is identified by a distinct figure number and is preceded by a short paragraph used to describe its contents and length. The seven figures in this appendix are:

Figure	Title	Page
A-1	Engagement Model Output for ASALT Benchmark	A-2
A-2	QKLOOK Formatted Input for ASALT Benchmark	A-9
A-3	VAMERGE Line Printer Output for ASALT Benchmark	A-33
A-4	VAMERGE Output for ASALT Data Deck	A-105
A-5	Final ASALT Data Deck for Benchmark	A-116
A-6	Line Printer Output for ASALT Benchmark	A-127
A-7	VAMERGE Source Code	A-148

Figure A-1. Engagement Model Output for ASALT Benchmark

This figure consists of six pages (A-3 through A-8) and is a copy of the output from the Engagement Model Computer Program. The values for the flight path coordinates and the "can" or "cannot" engage status associated with each point are used in another format, as input for the ASALT Program.

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2022-2023	2023-2024
2024-2025	2025-2026
2026-2027	2027-2028
2028-2029	2029-2030
2030-2031	2031-2032
2032-2033	2033-2034
2034-2035	2035-2036
2036-2037	2037-2038
2038-2039	2039-2040
2040-2041	2041-2042
2042-2043	2043-2044
2044-2045	2045-2046
2046-2047	2047-2048
2048-2049	2049-2050
2050-2051	2051-2052
2052-2053	2053-2054
2054-2055	2055-2056
2056-2057	2057-2058
2058-2059	2059-2060
2060-2061	2061-2062
2062-2063	2063-2064
2064-2065	2065-2066
2066-2067	2067-2068
2068-2069	2069-2070
2070-2071	2071-2072
2072-2073	2073-2074
2074-2075	2075-2076
2076-2077	2077-2078
2078-2079	2079-2080
2080-2081	2081-2082
2082-2083	2083-2084
2084-2085	2085-2086
2086-2087	2087-2088
2088-2089	2089-2090
2090-2091	2091-2092
2092-2093	2093-2094
2094-2095	2095-2096
2096-2097	2097-2098
2098-2099	2099-2100
2100-2101	2101-2102
2102-2103	2103-2104
2104-2105	2105-2106
2106-2107	2107-2108
2108-2109	2109-2110
2110-2111	2111-2112
2112-2113	2113-2114
2114-2115	2115-2116
2116-2117	2117-2118
2118-2119	2119-2120
2120-2121	2121-2122
2122-2123	2123-2124
2124-2125	2125-2126
2126-2127	2127-2128
2128-2129	2129-2130
2130-2131	2131-2132
2132-2133	2133-2134
2134-2135	2135-2136
2136-2137	2137-2138
2138-2139	2139-2140
2140-2141	2141-2142
2142-2143	2143-2144
2144-2145	2145-2146
2146-2147	2147-2148
2148-2149	2149-2150
2150-2151	2151-2152
2152-2153	2153-2154
2154-2155	2155-2156
2156-2157	2157-2158
2158-2159	2159-2160
2160-2161	2161-2162
2162-2163	2163-2164
2164-2165	2165-2166
2166-2167	2167-2168
2168-2169	2169-2170
2170-2171	2171-2172
2172-2173	2173-2174
2174-2175	2175-2176
2176-2177	2177-2178
2178-2179	2179-2180
2180-2181	2181-2182
2182-2183	2183-2184
2184-2185	2185-2186
2186-2187	2187-2188
2188-2189	2189-2190
2190-2191	2191-2192
2192-2193	2193-2194
2194-2195	2195-2196
2196-2197	2197-2198
2198-2199	2199-2200
2200-2201	2201-2202
2202-2203	2203-2204
2204-2205	2205-2206
2206-2207	2207-2208
2208-2209	2209-2210
2210-2211	

ACQUISITION ENVELOPE - HANGS AS A FUNCTION OF ALTITUDE AND ELEVATION.

[illegible]

KADAM: WILKINSON SIGNAL-TO-NOISE RATIO FOR DETECTION = 10.00 SIGNAL-TO-NOISE EQUATION CONSTANT = .77905E+15

MAJAN NAME: MIJAN EFFELIVE CHAFF=105(GAL NAME = 100.00  
CHAFF NAME= LUCALLO ( =000.00 100.0) TO ( 0.0 200.0)  
CHAFF MAJAN (MISS SECTIVE= 5000.0 SUARE METERS

TARGET WADSWORTH CROSS SECTION.

DATE	TO	AMOUNT	BALANCE
1900	TO BALANCE	100.00	100.00
1901	TO BALANCE	100.00	200.00
1902	TO BALANCE	100.00	300.00
1903	TO BALANCE	100.00	400.00
1904	TO BALANCE	100.00	500.00
1905	TO BALANCE	100.00	600.00
1906	TO BALANCE	100.00	700.00
1907	TO BALANCE	100.00	800.00
1908	TO BALANCE	100.00	900.00
1909	TO BALANCE	100.00	1000.00
1910	TO BALANCE	100.00	1100.00
1911	TO BALANCE	100.00	1200.00
1912	TO BALANCE	100.00	1300.00
1913	TO BALANCE	100.00	1400.00
1914	TO BALANCE	100.00	1500.00
1915	TO BALANCE	100.00	1600.00
1916	TO BALANCE	100.00	1700.00
1917	TO BALANCE	100.00	1800.00
1918	TO BALANCE	100.00	1900.00
1919	TO BALANCE	100.00	2000.00
1920	TO BALANCE	100.00	2100.00
1921	TO BALANCE	100.00	2200.00
1922	TO BALANCE	100.00	2300.00
1923	TO BALANCE	100.00	2400.00
1924	TO BALANCE	100.00	2500.00
1925	TO BALANCE	100.00	2600.00
1926	TO BALANCE	100.00	2700.00
1927	TO BALANCE	100.00	2800.00
1928	TO BALANCE	100.00	2900.00
1929	TO BALANCE	100.00	3000.00
1930	TO BALANCE	100.00	3100.00
1931	TO BALANCE	100.00	3200.00
1932	TO BALANCE	100.00	3300.00
1933	TO BALANCE	100.00	3400.00
1934	TO BALANCE	100.00	3500.00
1935	TO BALANCE	100.00	3600.00
1936	TO BALANCE	100.00	3700.00
1937	TO BALANCE	100.00	3800.00
1938	TO BALANCE	100.00	3900.00
1939	TO BALANCE	100.00	4000.00
1940	TO BALANCE	100.00	4100.00
1941	TO BALANCE	100.00	4200.00
1942	TO BALANCE	100.00	4300.00
1943	TO BALANCE	100.00	4400.00
1944	TO BALANCE	100.00	4500.00
1945	TO BALANCE	100.00	4600.00
1946	TO BALANCE	100.00	4700.00
1947	TO BALANCE	100.00	4800.00
1948	TO BALANCE	100.00	4900.00
1949	TO BALANCE	100.00	5000.00
1950	TO BALANCE	100.00	5100.00
1951	TO BALANCE	100.00	5200.00
1952	TO BALANCE	100.00	5300.00
1953	TO BALANCE	100.00	5400.00
1954	TO BALANCE	100.00	5500.00
1955	TO BALANCE	100.00	5600.00
1956	TO BALANCE	100.00	5700.00
1957	TO BALANCE	100.00	5800.00
1958	TO BALANCE	100.00	5900.00
1959	TO BALANCE	100.00	6000.00
1960	TO BALANCE	100.00	6100.00
1961	TO BALANCE	100.00	6200.00
1962	TO BALANCE	100.00	6300.00
1963	TO BALANCE	100.00	6400.00
1964	TO BALANCE	100.00	6500.00
1965	TO BALANCE	100.00	6600.00
1966	TO BALANCE	100.00	6700.00
1967	TO BALANCE	100.00	6800.00
1968	TO BALANCE	100.00	6900.00
1969	TO BALANCE	100.00	7000.00
1970	TO BALANCE	100.00	7100.00
1971	TO BALANCE	100.00	7200.00
1972	TO BALANCE	100.00	7300.00
1973	TO BALANCE	100.00	7400.00
1974	TO BALANCE	100.00	7500.00
1975	TO BALANCE	100.00	7600.00
1976	TO BALANCE	100.00	7700.00
1977	TO BALANCE	100.00	7800.00
1978	TO BALANCE	100.00	7900.00
1979	TO BALANCE		

IN LOCKER: M/L, 100 IN SIGNAL = 7.00  
SEEK SENSITIVITY = .78000E+07 WATTS/SQ. METER

# ATMOSPHERIC TRANSMISSION FACTORS

WAGE (M)	304.6	1524.0	3452.4	9144.0	12192.0
FACTIMS	.6106	.49740	.43110	.36621	.34400

TARGET BALANCE (CATTS/STERADIAN)

ELEVATION	0	45.0	90.0	135.0	180.0	AZIMUTH	225.0	270.0	315.0
10.0	3.0	14.0	40.0	66.0	90.0		60.0	40.0	10.0
45.0	4.0	14.0	45.0	65.0	95.0		65.0	45.0	15.0
90.0	5.0	20.0	50.0	70.0	100.0		70.0	50.0	20.0
135.0	4.0	14.0	40.0	65.0	90.0		65.0	45.0	15.0
170.0	3.0	17.0	40.0	62.0	92.0		60.0	40.0	10.0

Yehia, Camille S. 1915:

CLEAN LIFE: POSITION OF PROBABILITY OF CLUB AS A FUNCTION OF RANGE AND ALTITUDE

DATE	DESCRIPTION	AMOUNT	BALANCE
1950.01.01	OPENING BALANCE	1250.00	1250.00
1950.01.15	PAYROLL	150.00	1400.00
1950.01.30	RENT	200.00	1200.00
1950.02.15	PAYROLL	150.00	1050.00
1950.02.28	RENT	200.00	850.00
1950.03.15	PAYROLL	150.00	700.00
1950.03.31	CLOSING BALANCE		700.00

Altitude	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	7500	8000	8500	9000	9500	10000
15000	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
10000	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
5000	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

MINIMUM PROBABILITY OF CLEAR LINE-OF-SIGHT = .0050 FOR ENGAGEMENT

DIGITAL TERRAIN ALTITUDES EVERY 1000 METERS  
 EASTING FROM 15000 TO 10000 METERS  
 NORTHING FROM 10000 TO 15000 METERS  
 EVERY 600M FLIGHT PATH ALTITUDE IS COMPARED TO THE TERRAIN ALTITUDE

Altitude 2410

Envelope Test

Time	X	Y	ALT	FILE OF FILE	MIN RANGE	MAX RANGE	ACQUISITION ENVELOPE	STATISTICAL DETECTION	WADAM IN LOCK-ON WADAM	CLEAR LOS DIGITAL
0.00	-12000.0	-924.0	4049.0	NO	YES	YES		.00		
1.00	-11173.1	-921.0	4091.1	NO	YES	YES		.00		
1.50	-11170.2	-920.2	4097.5	NO	YES	YES		.00		
2.00	-11161.7	-919.1	4105.5	NO	YES	YES		.00		
2.50	-11149.3	-918.5	4124.4	NO	YES	YES		.00		
3.00	-11130.5	-918.4	4145.5	NO	YES	YES		.00		
3.50	-11124.3	-918.4	4166.3	NO	YES	YES		.00		
4.00	-11118.3	-918.5	4189.1	NO	YES	YES		.00		
4.50	-10942.6	-914.5	4207.6	NO	YES	YES		.00		
5.00	-10848.7	-914.4	4223.6	NO	YES	YES		.00		
5.50	-10746.4	-914.4	4237.2	NO	YES	YES		.00		
6.00	-10613.9	-916.7	4246.3	NO	YES	YES		.00		
6.50	-10487.2	-918.7	4257.0	NO	YES	YES		.00		
7.00	-10360.3	-918.4	4263.3	NO	YES	YES		.00		
7.50	-10233.4	-918.9	4267.1	NO	YES	YES		.00		
8.00	-10106.4	-918.9	4266.4	NO	YES	YES		.00		
8.50	-9979.5	-918.9	4267.9	NO	YES	YES		.00		
9.00	-9852.5	-917.5	4266.7	NO	YES	YES		.00		
9.50	-9725.6	-914.1	4264.3	NO	YES	YES		.00		
10.00	-9594.8	-908.6	4260.7	NO	YES	YES		.00		
10.50	-9472.1	-901.0	4255.9	NO	YES	YES		.00		
11.00	-9345.6	-891.2	4249.9	YES	YES	YES	YES	.73	YES	AC
11.50	-9219.4	-879.3	4242.6	YES	YES	YES	YES	.73	YES	AC
12.00	-9093.5	-865.3	4234.1	YES	YES	YES	YES	.73	YES	AC
12.50	-8967.9	-849.3	4224.4	YES	YES	YES	YES	.73	YES	AC
13.00	-8842.0	-831.1	4213.5	YES	YES	YES	YES	.73	YES	AC
13.50	-8717.9	-810.9	4201.3	YES	YES	YES	YES	.72	YES	AC
14.00	-8593.0	-786.5	4186.0	YES	YES	YES	YES	.72	YES	AC
14.50	-8469.4	-760.2	4173.4	YES	YES	YES	YES	.72	YES	AC
15.00	-8346.2	-737.7	4157.6	YES	YES	YES	YES	.71	YES	AC
15.50	-8224.0	-709.3	4140.6	YES	YES	YES	YES	.70	YES	AC
16.00	-8102.0	-676.6	4122.4	YES	YES	YES	YES	.70	YES	AC
16.50	-7980.3	-644.3	4103.1	YES	YES	YES	YES	.70	YES	AC
17.00	-7858.6	-611.6	4082.5	YES	YES	YES	YES	.69	YES	AC
17.50	-7736.9	-575.4	4060.7	YES	YES	YES	YES	.69	YES	AC
18.00	-7621.0	-537.0	4037.7	YES	YES	YES	YES	.69	YES	AC
18.50	-7503.4	-496.6	4013.6	YES	YES	YES	YES	.68	YES	AC
19.00	-7384.4	-454.4	3986.3	YES	YES	YES	YES	.68	YES	AC
19.50	-7270.7	-410.2	3961.6	YES	YES	YES	YES	.67	YES	AC
20.00	-7155.6	-364.2	3934.2	YES	YES	YES	YES	.67	YES	AC
20.50	-7041.0	-318.3	3905.4	YES	YES	YES	YES	.66	YES	AC
21.00	-6927.4	-269.5	3875.4	YES	YES	YES	YES	.66	YES	AC
21.50	-6816.4	-215.0	3844.4	YES	YES	YES	YES	.64	YES	AC
22.00	-6706.1	-161.6	3812.2	YES	YES	YES	YES	.62	YES	AC
22.50	-6595.7	-108.5	3778.4	YES	YES	YES	YES	.60	YES	AC
23.00	-6486.5	-49.7	3744.4	YES	YES	YES	YES	.58	YES	AC
23.50	-6378.1	6.9	3706.8	YES	YES	YES	YES	.54	YES	AC
24.00	-6270.0	64.5	3672.5	YES	YES	YES	YES	.50	YES	AC
24.50	-6172.0	132.9	3639.0	YES	YES	YES	YES	.50	YES	AC
25.00	-6071.1	195.3	3610.0	YES	YES	YES	YES	.50	YES	AC
25.50	-5967.1	254.1	3584.5	YES	YES	YES	YES	.49	YES	AC
26.00	-5851.4	306.4	3562.0	YES	YES	YES	YES	.48	YES	AC
26.50	-5741.2	359.3	3543.8	YES	YES	YES	YES	.46	YES	AC
27.00	-5629.7	405.1	3526.4	YES	YES	YES	YES	.46	YES	AC
27.50	-5517.4	441.4	3510.9	YES	YES	YES	YES	.44	YES	AC
28.00	-5409.0	464.6	3504.0	YES	YES	YES	YES	.44	YES	AC

25.00	-5269.1	517.5	3503.7	YES	YES	.48	YES	NC	YES
26.50	-5172.6	546.8	3502.3	YES	YES	.49	YES	NC	YES
29.00	-5055.2	571.2	3504.4	YES	YES	.49	YES	NC	YES
29.50	-4937.1	541.5	3509.6	YES	YES	.50	YES	NC	YES
30.00	-4818.5	607.4	3516.6	YES	YES	.52	YES	NC	YES
30.50	-4694.7	618.7	3531.1	YES	YES	.53	YES	NC	YES
31.00	-4561.0	625.5	3548.4	YES	YES	.55	YES	NC	YES
31.50	-4462.5	627.4	3566.1	YES	YES	.56	YES	NC	YES
32.00	-4344.6	626.5	3568.1	YES	YES	.54	YES	NC	YES
32.50	-4227.3	624.7	3612.6	YES	YES	.61	YES	NC	YES
33.00	-4111.5	622.8	3639.2	YES	YES	.64	YES	NC	YES
33.50	-3997.8	621.0	3667.9	YES	YES	.66	YES	NC	YES
34.00	-3866.4	619.3	3698.5	YES	YES	.69	YES	NC	YES
34.50	-3777.4	617.6	3731.0	YES	YES	.72	YES	NC	YES
35.00	-3670.5	615.9	3765.5	YES	YES	.75	YES	NC	YES
35.50	-3565.0	614.2	3802.3	YES	YES	.74	YES	NC	YES
36.00	-3460.2	612.6	3840.6	YES	YES	.82	YES	NC	YES
36.50	-3354.7	610.9	3877.4	YES	YES	.84	YES	NC	YES
37.00	-3246.6	609.2	3912.0	YES	YES	.85	YES	NC	YES
37.50	-3141.8	607.6	3944.4	YES	YES	.86	YES	NC	YES
38.00	-3034.3	605.9	3974.6	YES	YES	.86	YES	NC	YES
38.50	-2926.1	604.2	4002.4	YES	YES	.87	YES	NC	YES
39.00	-2817.4	602.5	4028.0	YES	YES	.86	YES	NC	YES
39.50	-2708.2	600.7	4051.2	YES	YES	.86	YES	NC	YES
40.00	-2594.5	599.0	4072.1	YES	YES	.89	YES	NC	YES
40.50	-2484.4	597.3	4090.5	YES	YES	.89	YES	NC	YES
41.00	-2377.9	595.5	4106.5	YES	YES	.90	YES	NC	YES
41.50	-2267.1	593.8	4120.2	YES	YES	.90	YES	NC	YES
42.00	-2156.0	592.0	4131.5	YES	YES	.90	YES	NC	YES
42.50	-2044.7	590.3	4140.3	YES	YES	.91	YES	NC	YES
43.00	-1933.3	588.5	4146.7	YES	YES	.91	YES	NC	YES
43.50	-1821.7	586.8	4150.6	YES	YES	.91	YES	NC	YES
44.00	-1710.1	585.0	4152.1	YES	YES	.91	YES	NC	YES
44.50	-1598.5	583.4	4151.8	YES	YES	.91	YES	NC	YES
45.00	-1487.7	584.9	4152.6	YES	YES	.91	YES	NC	YES
45.50	-1378.4	593.1	4153.0	YES	YES	.91	YES	NC	YES
46.00	-1271.2	608.3	4151.5	YES	YES	.91	YES	NC	YES
46.50	-1166.5	630.4	4148.0	YES	YES	.91	YES	NC	YES
47.00	-1064.8	659.3	4142.7	YES	YES	.91	YES	NC	YES
47.50	-966.4	694.6	4135.6	YES	YES	.91	YES	NC	YES
48.00	-871.9	736.2	4126.7	YES	YES	.91	YES	NC	YES
48.50	-781.7	783.8	4116.2	YES	YES	.91	YES	NC	YES
49.00	-695.6	837.4	4103.9	YES	YES	.91	YES	NC	YES
49.50	-613.4	897.2	4089.8	YES	YES	.91	YES	NC	YES
50.00	-536.2	962.8	4074.1	YES	YES	.91	YES	NC	YES
50.50	-464.0	1033.3	4056.9	YES	YES	.91	YES	NC	YES
51.00	-397.3	1106.4	4036.3	YES	YES	.91	YES	NC	YES
51.50	-336.4	1188.6	4018.3	YES	YES	.91	YES	NC	YES
52.00	-281.6	1272.7	3997.2	YES	YES	.91	YES	NC	YES
52.50	-233.1	1360.2	3974.9	YES	YES	.91	YES	NC	YES
53.00	-191.1	1450.8	3951.7	YES	YES	.90	YES	NC	YES
53.50	-155.9	1543.9	3927.6	YES	YES	.90	YES	NC	YES
54.00	-127.5	1639.2	3902.8	YES	YES	.90	YES	NC	YES
54.50	-106.1	1736.1	3877.3	YES	YES	.90	YES	NC	YES
55.00	-91.6	1834.2	3851.4	YES	YES	.90	YES	NC	YES
55.50	-84.2	1933.0	3825.1	YES	YES	.84	YES	NC	YES
56.00	-82.6	2032.0	3798.5	YES	YES	.84	YES	NC	YES
56.50	-83.0	2131.1	3771.7	YES	YES	.84	YES	NC	YES
57.00	-83.5	2230.4	3744.4	YES	YES	.85	YES	NC	YES
57.50	-84.0	2330.5	3717.6	YES	YES	.85	YES	NC	YES



96.99	-2542.9	12174.3	5069.3	YES	YES	YES	1.00	YES
95.49	-2656.1	12229.3	5976.0	YES	YES	YES	1.00	YES
95.99	-2770.0	12277.8	6086.0	YES	YES	YES	1.00	YES
96.49	-2884.4	12319.9	6196.9	YES	YES	YES	1.00	YES
96.99	-2999.0	12355.0	6310.7	YES	YES	YES	1.00	YES
97.49	-3113.6	12393.4	6423.1	YES	YES	YES	1.00	YES
97.99	-3228.3	12430.4	6535.9	YES	YES	YES	1.00	YES
98.49	-3342.5	12469.4	6646.9	YES	YES	YES	1.00	YES
98.99	-3456.1	12506.9	6761.9	YES	YES	YES	1.00	YES
99.49	-3568.9	12547.6	6874.7	YES	YES	YES	1.00	YES
99.99	-3680.0	12583.8	6967.9	YES	YES	YES	1.00	YES
100.49	-3793.6	12619.0	7102.3	YES	YES	YES	1.00	YES
100.99	-3906.8	12654.2	7216.2	YES	YES	YES	1.00	YES
101.49	-4005.9	12690.3	7326.5	YES	YES	YES	1.00	YES
101.99	-4115.7	12726.4	7439.0	YES	YES	YES	1.00	YES
102.49	-4226.3	12769.5	7548.0	YES	YES	YES	1.00	YES
102.99	-4337.6	12814.6	7655.2	YES	YES	YES	1.00	YES
103.49	-4449.0	12860.6	7760.7	YES	YES	YES	1.00	YES
103.99	-4562.8	12908.6	7864.6	YES	YES	YES	1.00	YES
104.49	-4676.6	12959.5	7966.7	YES	YES	YES	1.00	YES
104.99	-4791.3	12974.4	8067.1	YES	YES	YES	1.00	YES
105.49	-4906.7	12969.3	8165.7	YES	YES	YES	1.00	YES
105.99	-5023.0	12964.2	8262.6	YES	YES	YES	1.00	YES
106.49	-5140.2	12958.9	8357.7	YES	YES	YES	1.00	YES
106.99	-5259.2	12953.7	8451.0	YES	YES	YES	1.00	YES
107.49	-5377.1	12946.4	8542.6	YES	YES	YES	1.00	YES
107.99	-5496.4	12939.3	8632.3	YES	YES	YES	1.00	YES
108.49	-5617.3	12937.6	8720.2	YES	YES	YES	1.00	YES
108.99	-5738.6	12932.4	8806.3	YES	YES	YES	1.00	YES
109.49	-5861.1	12926.9	8890.5	YES	YES	YES	1.00	YES
109.99	-5984.2	12921.5	8972.9	YES	YES	YES	1.00	YES

END OF FLIGHT DATA

ENGAGE FLIGHT PATH TIME INTERVAL SUMMARY:

ALL REQUESTED ENGAGEMENT TESTS



Figure A-2. QKLOOK Formatted Input for ASALT Benchmark

The data on the 23 pages (A-10 through A-32) of this figure must be assembled manually. They consist primarily of component characteristics for the aircraft model, and are used as input for Program QKPK from the set of QKLOOK Programs.



304	2	0	9	2	24	0.00	0.00	1.00	1.00
307	2	0	9	2	25	0.00	0.00	0.00	1.00
308	2	0	0	2	25	0.00	0.00	0.00	1.00
309	2	0	0	2	25	0.00	0.00	0.00	1.00
311	2	0	0	2	29	0.00	0.00	0.00	1.00
312	0	0	9	0	25	0.00	0.00	0.00	1.00
313	0	0	9	0	25	0.00	0.00	0.00	1.00
314	2	0	0	2	25	0.00	0.00	0.00	1.00
315	2	0	0	2	25	0.00	0.00	0.00	1.00
316	2	0	0	2	25	0.00	0.00	0.00	1.00
317	2	0	0	2	25	0.00	0.00	0.00	1.00
318	2	0	0	2	25	0.00	0.00	0.00	1.00
319	2	0	0	2	25	0.00	0.00	0.00	1.00
320	2	0	0	2	25	0.00	0.00	0.00	1.00
321	0	0	5	0	29	0.00	0.00	0.00	1.00
322	2	0	0	2	29	0.00	0.00	0.00	1.00
351	2	0	0	2	25	0.00	0.00	0.00	1.00
352	0	0	9	0	25	0.00	0.00	0.00	1.00
353	0	0	9	0	25	0.00	0.00	0.00	1.00
354	0	0	9	0	25	0.00	0.00	0.00	1.00
355	0	0	9	0	25	0.00	0.00	0.00	1.00
356	2	0	0	2	25	0.00	0.00	0.00	1.00
357	0	0	9	0	29	0.00	0.00	0.00	1.00
358	2	0	0	2	25	0.00	0.00	0.00	1.00
359	2	0	0	2	25	0.00	0.00	0.00	1.00
361	2	0	0	2	25	0.00	0.00	0.00	1.00
362	0	0	9	0	25	0.00	0.00	0.00	1.00
363	0	0	9	0	25	0.00	0.00	0.00	1.00
364	2	0	0	2	25	0.00	0.00	0.00	1.00
365	2	0	0	2	25	0.00	0.00	0.00	1.00
366	2	0	0	2	25	0.00	0.00	0.00	1.00
367	2	0	0	2	25	0.00	0.00	0.00	1.00
368	2	0	0	2	25	0.00	0.00	0.00	1.00
369	2	0	0	2	25	0.00	0.00	0.00	1.00
370	2	0	0	2	25	0.00	0.00	0.00	1.00
371	0	0	5	0	29	0.00	0.00	0.00	1.00
372	2	0	0	2	29	0.00	0.00	0.00	1.00
401	2	0	0	2	25	0.00	0.00	0.00	1.00
402	2	0	0	2	29	0.00	0.00	0.00	1.00
403	2	0	0	2	25	0.00	0.00	0.00	1.00
404	4	0	0	2	25	0.00	0.00	0.00	1.00
405	4	0	0	2	25	0.00	0.00	0.00	1.00
406	0	0	9	0	25	0.00	0.00	0.00	1.00
407	0	0	9	0	25	0.00	0.00	0.00	1.00
451	2	0	0	2	24	0.00	0.00	0.00	1.00
452	2	0	0	2	29	0.00	0.00	0.00	1.00
453	2	0	0	2	24	0.00	0.00	0.00	1.00
454	4	0	0	2	25	0.00	0.00	0.00	1.00
455	4	0	0	2	24	0.00	0.00	0.00	1.00
456	0	0	9	0	25	0.00	0.00	0.00	1.00
457	0	0	9	0	25	0.00	0.00	0.00	1.00
501	0	0	9	0	29	0.00	0.00	0.00	1.00
502	0	0	9	0	25	0.00	0.00	0.00	1.00
503	0	0	9	0	25	0.00	0.00	0.00	1.00
504	0	0	9	0	25	0.00	0.00	0.00	1.00
505	0	0	9	0	25	0.00	0.00	0.00	1.00
506	4	0	0	2	24	0.00	0.00	0.00	1.00
507	4	0	0	2	24	0.00	0.00	0.00	1.00
508	4	0	0	2	24	0.00	0.00	0.00	1.00
509	0	0	9	0	24	0.00	0.00	0.00	1.00
510	0	0	9	0	24	0.00	0.00	0.00	1.00

551	0	0	9	1	24	.00	.00	.00	1.0	1
552	0	0	9	0	26	.00	.00	.00	1.0	1
553	0	0	9	0	26	.00	.00	.00	1.0	1
554	0	0	6	0	26	.00	.00	.00	1.0	1
555	0	0	9	0	26	.00	.00	.00	1.0	1
556	4	0	0	2	26	.00	.00	.00	1.0	1
557	4	0	0	2	26	.00	.00	.00	1.0	1
558	0	0	0	0	26	.00	.00	.00	1.0	1
559	0	0	0	0	26	.00	.00	.00	1.0	1
560	2	0	0	2	32	.00	.00	.00	1.0	1
561	2	0	0	2	32	.00	.00	.00	1.0	1
562	2	0	0	2	32	.00	.00	.00	1.0	1
563	2	0	0	2	32	.00	.00	.00	1.0	1
564	2	0	0	2	32	.00	.00	.00	1.0	1
565	10	0	0	2	26	.00	.00	.00	1.0	1
566	10	0	0	2	26	.00	.00	.00	1.0	1
567	10	0	0	2	26	.00	.00	.00	1.0	1
568	10	0	0	2	26	.00	.00	.00	1.0	1
569	10	0	0	2	26	.00	.00	.00	1.0	1
570	10	0	0	2	26	.00	.00	.00	1.0	1
571	10	0	0	2	26	.00	.00	.00	1.0	1
572	10	0	0	2	26	.00	.00	.00	1.0	1
573	10	0	0	2	26	.00	.00	.00	1.0	1
574	10	0	0	2	26	.00	.00	.00	1.0	1
575	10	0	0	2	26	.00	.00	.00	1.0	1
576	10	0	0	2	26	.00	.00	.00	1.0	1
577	10	0	0	2	26	.00	.00	.00	1.0	1
578	10	0	0	2	26	.00	.00	.00	1.0	1
579	10	0	0	2	26	.00	.00	.00	1.0	1
580	10	0	0	2	26	.00	.00	.00	1.0	1
581	10	0	0	2	26	.00	.00	.00	1.0	1
582	10	0	0	2	26	.00	.00	.00	1.0	1
583	10	0	0	2	26	.00	.00	.00	1.0	1
584	10	0	0	2	26	.00	.00	.00	1.0	1
585	10	0	0	2	26	.00	.00	.00	1.0	1
586	10	0	0	2	26	.00	.00	.00	1.0	1
587	10	0	0	2	26	.00	.00	.00	1.0	1
588	10	0	0	2	26	.00	.00	.00	1.0	1
589	10	0	0	2	26	.00	.00	.00	1.0	1
590	10	0	0	2	26	.00	.00	.00	1.0	1
591	10	0	0	2	26	.00	.00	.00	1.0	1
592	10	0	0	2	26	.00	.00	.00	1.0	1
593	10	0	0	2	26	.00	.00	.00	1.0	1
594	10	0	0	2	26	.00	.00	.00	1.0	1
595	10	0	0	2	26	.00	.00	.00	1.0	1
596	10	0	0	2	26	.00	.00	.00	1.0	1
597	10	0	0	2	26	.00	.00	.00	1.0	1
598	10	0	0	2	26	.00	.00	.00	1.0	1
599	10	0	0	2	26	.00	.00	.00	1.0	1
600	10	0	0	2	26	.00	.00	.00	1.0	1
601	10	0	0	2	26	.00	.00	.00	1.0	1
602	10	0	0	2	26	.00	.00	.00	1.0	1

1054	1.00	1.00	1.00	1.00
1071	1.00	1.00	1.00	1.00
1072	1.00	1.00	1.00	1.00
1073	1.00	1.00	1.00	1.00
1074	1.00	1.00	1.00	1.00
1075	1.00	1.00	1.00	1.00
1076	1.00	1.00	1.00	1.00
1077	1.00	1.00	1.00	1.00
1078	1.00	1.00	1.00	1.00
1079	1.00	1.00	1.00	1.00
1080	1.00	1.00	1.00	1.00
1081	1.00	1.00	1.00	1.00
1082	1.00	1.00	1.00	1.00
1083	1.00	1.00	1.00	1.00
1091	1.00	1.00	1.00	1.00
1092	1.00	1.00	1.00	1.00
1093	1.00	1.00	1.00	1.00
1094	1.00	1.00	1.00	1.00
1096	1.00	1.00	1.00	1.00
1097	1.00	1.00	1.00	1.00
1098	1.00	1.00	1.00	1.00
1099	1.00	1.00	1.00	1.00
1101	1.00	1.00	1.00	1.00
1102	1.00	1.00	1.00	1.00
1103	1.00	1.00	1.00	1.00
1104	1.00	1.00	1.00	1.00
1105	1.00	1.00	1.00	1.00
1106	1.00	1.00	1.00	1.00
1107	1.00	1.00	1.00	1.00
1111	1.00	1.00	1.00	1.00
1112	1.00	1.00	1.00	1.00
1113	1.00	1.00	1.00	1.00
1114	1.00	1.00	1.00	1.00
1115	1.00	1.00	1.00	1.00
1116	1.00	1.00	1.00	1.00
1117	1.00	1.00	1.00	1.00
1118	1.00	1.00	1.00	1.00
1119	1.00	1.00	1.00	1.00
1120	1.00	1.00	1.00	1.00
1201	1.00	1.00	1.00	1.00
1202	1.00	1.00	1.00	1.00
1203	1.00	1.00	1.00	1.00
1204	1.00	1.00	1.00	1.00
1205	1.00	1.00	1.00	1.00
1206	1.00	1.00	1.00	1.00
1207	1.00	1.00	1.00	1.00
1208	1.00	1.00	1.00	1.00
1209	1.00	1.00	1.00	1.00
1210	1.00	1.00	1.00	1.00
1211	1.00	1.00	1.00	1.00
1212	1.00	1.00	1.00	1.00
1213	1.00	1.00	1.00	1.00
1214	1.00	1.00	1.00	1.00
1215	1.00	1.00	1.00	1.00
1216	1.00	1.00	1.00	1.00
1217	1.00	1.00	1.00	1.00
1221	1.00	1.00	1.00	1.00
1222	1.00	1.00	1.00	1.00
1223	1.00	1.00	1.00	1.00
1224	1.00	1.00	1.00	1.00

[illegible]

1545	10 0 0	1 370.	.00	.00	1.0 2 1
1551	10 0 0	1 204.	.00	.00	1.0 2 1
1552	10 0 0	1 204.	.00	.00	1.0 2 1
1553	10 0 0	1 204.	.00	.00	1.0 2 1
1554	10 0 0	1 404.	.00	.00	1.0 2 1
1555	10 0 0	1 623.	.00	.00	1.0 2 1
1561	4 0 0	1 204.	.00	.00	1.0 2 1
1562	10 0 0	1 704.	.00	.00	1.0 2 1
1563	10 0 0	1 615.	.00	.00	1.0 2 1
1566	10 0 0	1 204.	.00	.00	1.0 2 1
1567	10 0 0	1 204.	.00	.00	1.0 2 1
1568	10 0 0	1 260.	.00	.00	1.0 2 1
1571	10 0 0	1 425.	.00	.00	1.0 2 1
1572	10 0 0	1 525.	.00	.00	1.0 2 1
1573	10 0 0	1 148.	.00	.00	1.0 2 1
1574	10 0 0	1 116.	.00	.00	.60 2 1
1575	10 0 0	1 121.	.00	.00	.60 2 1
1576	10 0 0	1 121.	.00	.00	.60 2 1
1577	10 0 0	1 143.	.00	.00	.60 2 1
1578	10 0 0	1 143.	.00	.00	.60 2 1
1579	10 0 0	1 121.	.00	.00	.60 2 1
1580	10 0 0	1 121.	.00	.00	.60 2 1
1581	10 0 0	1 121.	.00	.00	.60 2 1
1582	10 0 0	1 121.	.00	.00	.60 2 1
1583	10 0 0	1 116.	.00	.00	1.0 2 1
1591	10 0 0	1 121.	.00	.00	1.0 2 1
1592	10 0 0	1 121.	.00	.00	1.0 2 1
1593	10 0 0	1 121.	.00	.00	1.0 2 1
1594	10 0 0	1 143.	.00	.00	1.0 2 1
1596	1 0 0	1 116.	.00	.00	1.0 2 1
1597	10 0 0	1 143.	.00	.00	1.0 2 1
1598	10 0 0	1 280.	.00	.00	1.0 2 1
1599	10 0 0	1 427.	.00	.00	1.0 2 1
1601	10 0 0	1 143.	.00	.00	.60 2 1
1602	10 0 0	1 143.	.00	.00	1.0 2 1
1603	1 0 0	1 126.	.00	.00	1.0 2 1
1604	1 0 0	1 121.	.00	.00	1.0 2 1
1605	10 0 0	1 153.	.00	.00	.60 2 1
1606	1 0 0	1 153.	.00	.00	1.0 2 1
1607	1 0 0	1 136.	.00	.00	1.0 2 1
1611	10 0 0	1 121.	.00	.00	1.0 2 1
1612	10 0 0	1 121.	.00	.00	1.0 2 1
1613	4 0 0	1 62.	.00	.00	1.0 2 1
1614	10 0 0	1 136.	.00	.00	1.0 2 1
1615	10 0 0	1 62.	.00	.00	1.0 2 1
1616	10 0 0	1 62.	.00	.00	1.0 2 1
1617	4 0 0	1 62.	.00	.00	1.0 2 1
1618	10 0 0	1 260.	.00	.00	1.0 2 1
1619	4 0 0	1 143.	.00	.00	1.0 2 1
1620	10 0 0	1 121.	.00	.00	1.0 2 1
1701	1 0 0	1 97.	.00	.00	.70 2 1
1702	10 0 0	1 67.	.00	.00	1.0 2 1
1703	1 0 0	1 67.	.00	.00	1.0 2 1
1704	10 0 0	1 67.	.00	.00	1.0 2 1
1705	10 0 0	1 106.	.00	.00	1.0 2 1
1706	1 0 0	1 106.	.00	.00	1.0 2 1
1707	10 0 0	1 106.	.00	.00	1.0 2 1
1708	10 0 0	1 106.	.00	.00	1.0 2 1
1709	1 0 0	1 106.	.00	.00	1.0 2 1
1710	10 0 0	1 106.	.00	.00	1.0 2 1

1711	1	117.	.00	.00	1.00
1712	1	108.	.00	.00	1.00
1713	1	106.	.00	.00	1.00
1714	1	108.	.00	.00	1.00
1715	1	105.	.00	.00	1.00
1716	1	106.	.00	.00	1.00
1717	1	106.	.00	.00	1.00
1721	1	67.	.00	.00	1.00
1722	1	67.	.00	.00	1.00
1723	1	67.	.00	.00	1.00
1724	1	67.	.00	.00	1.00
1725	1	67.	.00	.00	1.00
1726	1	106.	.00	.00	1.00
1727	1	106.	.00	.00	1.00
1728	1	106.	.00	.00	1.00
1729	1	106.	.00	.00	1.00
1730	1	106.	.00	.00	1.00
1731	1	106.	.00	.00	1.00
1732	1	63.	.00	.00	1.00
1733	1	63.	.00	.00	1.00
1801	1	122.	.00	.00	1.00
1802	1	62.	.00	.00	1.00
1803	1	99.	.00	.00	1.00
1804	1	232.	.00	.00	1.00
1805	1	177.	.00	.00	1.00
1806	1	153.	.00	.00	1.00
1811	1	128.	.00	.00	1.00
1812	1	66.	.00	.00	1.00
1813	1	126.	.00	.00	1.00
1814	1	128.	.00	.00	1.00
1901	1	177.	.00	.00	1.00
1902	1	177.	.00	.00	1.00
1903	1	177.	.00	.00	1.00
1904	1	204.	.00	.00	1.00
1905	1	204.	.00	.00	1.00
1906	1	71.	.00	.00	1.00
1907	1	127.	.00	.00	1.00
1908	1	65.	.00	.00	1.00
1909	1	165.	.00	.00	1.00
1911	1	177.	.00	.00	1.00
2001	1	37.	.00	.00	1.00
2002	1	37.	.00	.00	1.00
2003	1	37.	.00	.00	1.00
2004	1	37.	.00	.00	1.00
2005	1	37.	.00	.00	1.00
2006	1	37.	.00	.00	1.00
2007	1	37.	.00	.00	1.00
2008	1	37.	.00	.00	1.00
3001	0	23.	.15	.15	.00
3002	2	23.	.10	.10	.00
3003	2	23.	.20	.20	.00
3004	2	23.	.00	.00	1.00
3005	2	23.	.00	.00	1.00
3006	2	23.	.00	.00	1.00
3007	2	23.	.00	.00	1.00
3101	2	29.	.00	.00	1.00
3102	1	20.	.00	.00	1.00
3103	1	24.	.00	.00	1.00
3104	2	24.	.00	.00	1.00
3105	2	24.	.00	.00	1.00





3234	2 0 0	1 29.	.00	.00	1.0 4 1
3235	1 0 0	1 29.	.00	.20	.00 4 1
3236	2 0 0	1 29.	.00	.00	1.0 4 1
3237	1 1 0	1 77.	.12	.12	.00 4 0
3238	2 0 0	1 77.	.00	.00	1.0 4 1
3239	2 0 0	1 29.	.00	.00	1.0 4 1
3301	2 0 0	1 29.	.00	.00	1.0 4 1
3302	1 0 0	1 29.	.00	.00	.10 4 1
3303	2 0 0	1 77.	.00	.00	1.0 4 1
3311	2 0 0	1 29.	.00	.00	1.0 4 1
3312	2 0 0	1 29.	.00	.00	1.0 4 1
3313	2 0 0	1 29.	.00	.00	1.0 4 1
3314	2 0 0	1 29.	.00	.00	1.0 4 1
3315	1 0 0	1 29.	.00	.00	1.0 4 1
3316	1 0 0	1 29.	.00	.00	1.0 4 1
3317	1 0 0	1 29.	.00	.00	1.0 4 1
3318	1 0 0	1 29.	.00	.00	1.0 4 1
3319	1 0 0	1 29.	.00	.15	.00 4 1
3401	1 0 0	1 77.	.00	.00	1.0 4 1
3402	1 0 0	1 77.	.00	.00	1.0 4 1
3411	1 0 0	1 77.	.00	.00	1.0 4 1
3412	1 0 0	1 77.	.00	.00	1.0 4 1
3421	1 0 0	1 77.	.00	.00	1.0 4 1
3422	1 0 0	1 77.	.00	.00	1.0 4 1
3423	1 0 0	1 77.	.00	.00	1.0 4 1
3424	1 0 0	1 77.	.00	.00	1.0 4 1
3431	2 0 0	1 29.	.00	.00	1.0 4 1
3432	2 0 0	1 29.	.00	.00	1.0 4 1
3433	1 0 0	1 29.	.00	.00	1.0 4 1
3434	2 0 0	1 71.	.00	.00	.20 4 1
3435	1 0 0	1 71.	.00	.00	1.0 4 1
3436	2 0 0	1 71.	.00	.00	.20 4 1
3441	2 0 0	1 77.	.00	.00	.10 4 1
3442	2 0 0	1 29.	.00	.20	.00 4 1
3443	2 0 0	1 29.	.00	.20	.00 4 1
3444	1 0 0	1 77.	.00	.00	.20 4 1
3445	1 0 0	1 29.	.00	.00	1.0 4 1
3446	1 0 0	1 29.	.00	.00	.20 4 1
3447	1 0 0	1 29.	.00	.00	1.0 4 1
3451	1 0 0	1 77.	.00	.00	.20 4 1
3452	1 0 0	1 77.	.00	.00	.20 4 1
3501	1 0 0	1 77.	.00	.00	.80 4 1
3502	1 0 0	1 77.	.00	.00	1.0 4 0
3503	1 1 0	1 77.	.00	.00	1.0 4 0
3504	1 1 0	1 77.	.20	.20	.00 4 0
3505	1 1 0	1 77.	.05	.05	.00 4 0
3506	1 1 0	1 77.	.05	.05	.00 4 0
3511	4 0 0	1 77.	.04	.04	.00 4 0
3512	4 0 0	1 77.	.00	.00	1.0 4 1
3513	4 0 0	1 77.	.00	.00	1.0 4 1
3514	4 1 0	1 77.	.05	.05	.00 4 0
3515	4 1 0	1 77.	.03	.03	.00 4 0
3521	1 0 0	1 77.	.00	.00	1.0 4 1
3522	1 0 0	1 77.	.00	.00	1.0 4 1
3523	1 0 0	1 77.	.00	.00	1.0 4 1
3524	1 0 0	1 77.	.00	.00	1.0 4 1
3531	4 0 0	1 77.	.00	.00	1.0 4 1
3532	4 0 0	1 77.	.00	.00	1.0 4 1
3533	4 0 0	1 77.	.00	.00	1.0 4 1
3534	4 0 0	1 77.	.00	.00	1.0 4 1

3545	1	0	0	0	1	77.	0.00	0.00	0.00	1.00
3546	1	0	0	0	1	77.	0.00	0.00	0.00	1.00
3547	10	0	0	0	1	77.	0.00	0.00	0.00	1.00
3548	10	0	0	0	1	77.	0.00	0.00	0.00	1.00
3549	1	0	0	0	1	77.	0.00	0.00	0.00	1.00
3550	2	0	0	0	1	77.	0.00	0.00	0.00	1.00
3551	4	0	0	0	1	77.	0.00	0.00	0.00	1.00
3552	4	0	0	0	1	77.	0.00	0.00	0.00	1.00
3553	4	0	0	0	1	77.	0.00	0.00	0.00	1.00
3554	4	0	0	0	1	77.	0.00	0.00	0.00	1.00
3555	4	0	0	0	1	77.	0.00	0.00	0.00	1.00
3556	4	0	0	0	1	77.	0.00	0.00	0.00	1.00
3557	10	0	0	0	1	77.	0.00	0.00	0.00	1.00
3558	1	0	0	0	1	77.	0.00	0.00	0.00	1.00
3559	4	0	0	0	1	77.	0.00	0.00	0.00	1.00
3560	4	0	0	0	1	77.	0.00	0.00	0.00	1.00
3561	4	0	0	0	1	77.	0.00	0.00	0.00	1.00
3562	10	0	0	0	1	77.	0.00	0.00	0.00	1.00
3563	1	0	0	0	1	77.	0.00	0.00	0.00	1.00
3564	2	0	0	0	1	77.	0.00	0.00	0.00	1.00
3565	4	0	0	0	1	77.	0.00	0.00	0.00	1.00
3566	4	0	0	0	1	77.	0.00	0.00	0.00	1.00
3567	4	0	0	0	1	77.	0.00	0.00	0.00	1.00
3568	4	0	0	0	1	77.	0.00	0.00	0.00	1.00
3569	4	0	0	0	1	77.	0.00	0.00	0.00	1.00
3570	4	0	0	0	1	77.	0.00	0.00	0.00	1.00
3571	4	0	0	0	1	77.	0.00	0.00	0.00	1.00
3572	4	0	0	0	1	77.	0.00	0.00	0.00	1.00
3573	4	0	0	0	1	77.	0.00	0.00	0.00	1.00
3574	4	0	0	0	1	77.	0.00	0.00	0.00	1.00
3575	4	0	0	0	1	77.	0.00	0.00	0.00	1.00
3576	4	0	0	0	1	77.	0.00	0.00	0.00	1.00
3577	10	0	0	0	1	77.	0.00	0.00	0.00	1.00
3578	1	0	0	0	1	77.	0.00	0.00	0.00	1.00
3579	4	0	0	0	1	77.	0.00	0.00	0.00	1.00
3580	4	0	0	0	1	77.	0.00	0.00	0.00	1.00
3581	4	0	0	0	1	77.	0.00	0.00	0.00	1.00
3582	10	0	0	0	1	77.	0.00	0.00	0.00	1.00
3583	1	0	0	0	1	77.	0.00	0.00	0.00	1.00
3584	2	0	0	0	1	77.	0.00	0.00	0.00	1.00
3585	4	0	0	0	1	77.	0.00	0.00	0.00	1.00
3586	4	0	0	0	1	77.	0.00	0.00	0.00	1.00
3587	4	0	0	0	1	77.	0.00	0.00	0.00	1.00
3588	4	0	0	0	1	77.	0.00	0.00	0.00	1.00
3589	4	0	0	0	1	77.	0.00	0.00	0.00	1.00
3590	4	0	0	0	1	77.	0.00	0.00	0.00	1.00
3591	4	0	0	0	1	77.	0.00	0.00	0.00	1.00
3592	4	0	0	0	1	77.	0.00	0.00	0.00	1.00
3593	4	0	0	0	1	77.	0.00	0.00	0.00	1.00
3594	4	0	0	0	1	77.	0.00	0.00	0.00	1.00
3595	4	0	0	0	1	77.	0.00	0.00	0.00	1.00
3596	4	0	0	0	1	77.	0.00	0.00	0.00	1.00
3597	10	0	0	0	1	77.	0.00	0.00	0.00	1.00

3651	2	0	0	1	77.	..	..	..	1.0	4	1
3652	4	0	0	1	77.	..	..	..	1.0	4	1
3653	4	0	0	1	77.	..	..	..	1.0	4	1
3654	4	0	0	1	77.	..	..	..	1.0	4	1
3655	4	0	0	1	77.	..	..	..	1.0	4	1
3656	4	0	0	1	77.	..	..	..	1.0	4	1
3657	4	0	0	1	77.	..	..	..	1.0	4	1
3658	4	0	0	1	77.	..	..	..	1.0	4	1
3659	4	0	0	1	77.	..	..	..	1.0	4	1
3660	4	0	0	1	77.	..	..	..	1.0	4	1
3661	10	0	0	1	77.	..	..	..	1.0	4	1
3662	1	0	0	1	77.	..	..	..	1.0	4	1
3671	4	0	0	1	77.	..	..	..	1.0	4	1
3672	4	0	0	1	77.	..	..	..	1.0	4	1
3673	4	0	0	1	77.	..	..	..	1.0	4	1
3674	4	0	0	1	77.	..	..	..	1.0	4	1
3675	4	0	0	1	77.	..	..	..	1.0	4	1
3676	4	0	0	1	77.	..	..	..	1.0	4	1
3681	4	0	0	1	77.	..	..	..	1.0	4	1
3692	4	0	0	1	77.	..	..	..	1.0	4	1
3693	4	0	0	1	77.	..	..	..	1.0	4	1
3694	4	0	0	1	77.	..	..	..	1.0	4	1
3695	4	0	0	1	77.	..	..	..	1.0	4	1
3696	4	0	0	1	77.	..	..	..	1.0	4	1
3701	2	0	0	1	77.	..	..	..	1.0	4	1
3702	2	0	0	1	77.	..	..	..	1.0	4	1
3703	2	0	0	1	77.	..	..	..	1.0	4	1
3704	2	0	0	1	77.	..	..	..	1.0	4	1
3705	2	0	0	1	77.	..	..	..	1.0	4	1
3706	2	0	0	1	77.	..	..	..	1.0	4	1
3707	10	0	0	1	77.	..	..	..	1.0	4	1
3708	10	0	0	1	77.	..	..	..	1.0	4	1
3709	10	0	0	1	77.	..	..	..	1.0	4	1
3712	2	0	0	1	77.	..	..	..	1.0	4	1
3713	2	0	0	1	77.	..	..	..	1.0	4	1
3714	2	0	0	1	77.	..	..	..	1.0	4	1
3715	2	0	0	1	77.	..	..	..	1.0	4	1
3716	2	0	0	1	77.	..	..	..	1.0	4	1
3717	2	0	0	1	77.	..	..	..	1.0	4	1
3718	10	0	0	1	77.	..	..	..	1.0	4	1
3719	10	0	0	1	77.	..	..	..	1.0	4	1
3821	2	0	0	1	77.	..	..	..	1.0	4	1
3823	4	0	0	1	77.	..	..	..	1.0	4	1
3824	4	0	0	1	77.	..	..	..	1.0	4	1
3823	4	0	0	1	77.	..	..	..	1.0	4	1
3824	4	0	0	1	77.	..	..	..	1.0	4	1
3861	2	0	0	1	77.	..	..	..	1.0	4	1
3862	4	0	0	1	77.	..	..	..	1.0	4	1
3872	4	0	0	1	77.	..	..	..	1.0	4	1
3875	4	0	0	1	77.	..	..	..	1.0	4	1
3876	1	0	0	1	77.	..	..	..	1.0	4	1
3877	1	0	0	1	77.	..	..	..	1.0	4	1
4001	2	0	0	1	29.	..	..	..	1.0	5	0
4002	0	0	4	1	29.	..	..	..	1.0	5	0
4004	1	1	0	1	29.	..	..	..	1.0	5	0
4005	1	1	0	1	29.	..	..	..	1.0	5	0
4006	1	1	0	1	29.	..	..	..	1.0	5	0
4007	1	1	0	1	29.	..	..	..	1.0	5	0
4008	1	1	1	1	29.	..	..	..	1.0	5	0

4011	1 0 0	1 29.	.00	.00	1.0 5 0
4012	0 0 0	1 29.	.00	.00	1.0 5 0
4013	0 0 0	1 29.	.00	.00	1.0 5 0
4014	1 1 0	1 29.	.00	.00	1.0 5 0
4015	1 1 0	1 29.	.00	.00	1.0 5 0
4016	1 1 0	1 29.	.00	.00	1.0 5 0
4017	1 1 0	1 29.	.00	.00	1.0 5 0
4018	1 1 0	1 29.	.00	.00	1.0 5 0
4021	1 0 0	1 29.	.00	.00	1.0 5 0
4022	0 0 0	1 29.	.00	.00	1.0 5 0
4023	0 0 0	1 29.	.00	.00	1.0 5 0
4024	1 1 0	1 29.	.00	.00	1.0 5 0
4025	1 1 0	1 29.	.00	.00	1.0 5 0
4026	1 1 0	1 29.	.00	.00	1.0 5 0
4027	1 1 0	1 29.	.00	.00	1.0 5 0
4028	1 1 0	1 29.	.00	.00	1.0 5 0
4031	1 0 0	1 29.	.00	.00	1.0 5 0
4033	0 0 0	1 29.	.00	.00	1.0 5 0
4034	1 1 0	1 29.	.00	.00	1.0 5 0
4035	1 1 0	1 29.	.00	.00	1.0 5 0
4036	1 1 0	1 29.	.00	.00	1.0 5 0
4037	1 1 0	1 29.	.00	.00	1.0 5 0
4038	1 1 0	1 29.	.00	.00	1.0 5 0
4101	1 0 0	1 29.	.00	.00	1.0 5 0
4102	1 0 0	1 29.	.00	.00	1.0 5 0
4201	1 0 0	1 85.	.00	.00	1.0 5 0
4202	1 0 0	1 85.	.00	.00	1.0 5 0
4211	0 0 0	1 60.	.00	.00	1.0 5 0
4212	0 0 0	1 60.	.00	.00	1.0 5 0
4213	1 0 0	1 60.	.00	.00	1.0 5 0
4214	1 0 0	1 60.	.00	.00	1.0 5 0
4215	1 1 0	1 60.	.00	.00	1.0 5 0
4216	1 1 0	1 60.	.00	.00	1.0 5 0
4221	1 1 0	1 60.	.00	.00	1.0 5 0
4222	1 1 0	1 60.	.00	.00	1.0 5 0
4223	1 0 0	1 60.	.00	.00	1.0 5 0
4224	1 0 0	1 60.	.00	.00	1.0 5 0
4301	1 0 0	1 29.	.00	.00	1.0 5 0
4302	1 0 0	1 29.	.00	.00	1.0 5 0
4303	1 0 0	1 29.	.00	.00	1.0 5 0
4401	1 0 0	1 86.	.00	.00	1.0 5 0
4402	1 0 0	1 90.	.00	.00	1.0 5 0
4403	1 0 0	1 90.	.00	.00	1.0 5 0
4404	1 0 0	1 65.	.00	.00	1.0 5 0
4405	1 0 0	1 107.	.00	.00	1.0 5 0
4406	1 0 0	1 197.	.00	.00	1.0 5 0
4411	1 0 0	1 79.	.00	.00	1.0 5 0
4412	1 0 0	1 79.	.00	.00	1.0 5 0
4413	1 0 0	1 107.	.00	.00	1.0 5 0
4414	1 0 0	1 107.	.00	.00	1.0 5 0
4415	1 0 0	1 107.	.00	.00	1.0 5 0
4416	1 0 0	1 91.	.00	.00	1.0 5 0
4417	1 0 0	1 107.	.00	.00	1.0 5 0
4418	1 0 0	1 107.	.00	.00	1.0 5 0
4421	1 0 0	1 121.	.00	.00	1.0 5 0
4422	1 0 0	1 83.	.00	.00	1.0 5 0
4423	1 0 0	1 121.	.00	.00	1.0 5 0
4424	1 0 0	1 121.	.00	.00	1.0 5 0
4425	1 0 0	1 121.	.00	.00	1.0 5 0
4426	1 0 0	1 121.	.00	.00	1.0 5 0

4427	10 0 0	1 121.	.00	.00	1.0 5 1
4428	10 0 0	1 121.	.00	.00	1.0 5 1
4429	10 0 0	1 121.	.00	.00	1.0 5 1
4431	4 0 0	1 121.	.00	.00	1.0 5 1
4432	4 0 0	1 121.	.00	.00	1.0 5 1
4433	10 0 0	1 121.	.00	.00	1.0 5 1
4434	10 0 0	1 121.	.00	.00	1.0 5 1
4435	10 0 0	1 121.	.00	.00	1.0 5 1
4501	1 0 0	1 40.	.00	.00	.80 5 1
4502	1 0 0	1 80.	.00	.00	.80 5 1
4503	1 0 0	1 80.	.00	.00	.20 5 1
4504	1 0 0	1 45.	.00	.00	.10 5 1
4505	4 0 0	1 107.	.00	.00	1.0 5 1
4506	10 0 0	1 197.	.00	.00	1.0 5 1
4511	1 0 0	1 79.	.00	.00	1.0 5 1
4512	1 0 0	1 79.	.00	.00	1.0 5 1
4513	10 0 0	1 107.	.00	.00	1.0 5 1
4514	10 0 0	1 107.	.00	.00	1.0 5 1
4515	10 0 0	1 107.	.00	.00	1.0 5 1
4516	10 0 0	1 41.	.00	.00	1.0 5 1
4517	10 0 0	1 107.	.00	.00	1.0 5 1
4518	10 0 0	1 107.	.00	.00	1.0 5 1
4521	10 0 0	1 121.	.00	.00	.80 5 1
4522	10 0 0	1 63.	.00	.00	.80 5 1
4523	4 0 0	1 121.	.00	.00	1.0 5 1
4524	4 0 0	1 121.	.00	.00	1.0 5 1
4525	10 0 0	1 121.	.00	.00	1.0 5 1
4526	10 0 0	1 121.	.00	.00	1.0 5 1
4527	10 0 0	1 121.	.00	.00	1.0 5 1
4528	10 0 0	1 121.	.00	.00	1.0 5 1
4529	10 0 0	1 121.	.00	.00	1.0 5 1
4531	4 0 0	1 121.	.00	.00	1.0 5 1
4532	4 0 0	1 121.	.00	.00	1.0 5 1
4533	10 0 0	1 121.	.00	.00	1.0 5 1
4534	10 0 0	1 121.	.00	.00	1.0 5 1
4535	10 0 0	1 121.	.00	.00	1.0 5 1
4601	1 0 0	1 29.	.00	.00	1.0 5 0
4602	1 1 0	1 29.	.00	.00	1.0 5 0
4701	2 0 0	2 26.	.00	.00	.00 5 0
4702	2 0 0	2 26.	.00	.00	.00 5 0
5001	1 0 0	1 29.	.00	.00	.70 6 0
5002	1 0 0	1 29.	.00	.00	.70 6 0
5003	1 0 0	1 29.	.00	.00	.70 6 0
6001	10 0 0	1 29.	.00	.00	1.0 7 0
6002	10 0 0	1 29.	.00	.00	.00 7 0
6101	0 0 7	0 29.	.00	.00	.00 7 0
6102	10 0 0	2 29.	.00	.00	.00 7 0
6103	10 0 0	2 29.	.00	.00	.00 7 0
6104	1 0 0	2 29.	.00	.00	.00 7 0
6105	1 0 0	2 29.	.00	.00	.00 7 0
6111	0 0 7	0 29.	.00	.00	.00 7 0
6112	10 0 0	2 29.	.00	.00	.00 7 0
6113	10 0 0	2 29.	.00	.00	.00 7 0
6114	1 0 0	2 29.	.00	.00	.00 7 0
6115	1 0 0	2 29.	.00	.00	.00 7 0
6201	0 0 7	0 29.	.00	.00	.00 7 0
6202	10 0 0	2 29.	.00	.00	.00 7 0
6203	10 0 0	2 29.	.00	.00	.00 7 0
6204	4 0 0	2 29.	.00	.00	.00 7 0
6215	1 1 1	2 29.	.00	.00	.00 7 0

6211	0 0 7	0 29.	.00	.00	.00 7 0
6212	10 0 0	2 29.	.00	.00	.00 7 0
6213	10 0 0	2 29.	.00	.00	.00 7 0
6214	4 0 0	2 29.	.00	.00	.00 7 0
6215	10 0 0	2 29.	.00	.00	.00 7 0
7001	2 0 0	1 71.	.00	.00	1.0 6 0
7002	2 0 0	1 71.	.00	.00	1.0 6 0
7003	2 0 0	1 26.	.00	.00	1.0 6 0
7004	2 0 0	1 26.	.00	.00	1.0 6 0
7005	2 0 0	1 26.	.00	.00	1.0 6 0
7006	2 0 0	1 32.	.00	.00	1.0 6 0
7007	2 0 0	1 26.	.00	.00	1.0 6 0
7008	2 0 0	1 32.	.00	.00	1.0 6 0
7009	2 0 0	1 24.	.00	.00	1.0 6 0
7010	2 0 0	1 26.	.00	.00	1.0 6 0
7011	2 0 0	1 32.	.00	.00	1.0 6 0
7012	2 0 0	1 26.	.00	.00	1.0 6 0
7013	2 0 0	1 32.	.00	.00	1.0 6 0
7014	2 0 0	1 26.	.00	.00	1.0 6 0
7015	2 0 0	1 26.	.00	.00	1.0 6 0
7016	2 0 0	1 32.	.00	.00	1.0 6 0
7017	2 0 0	1 32.	.00	.00	1.0 6 0
7018	2 0 0	1 32.	.00	.00	1.0 6 0
7019	2 0 0	1 32.	.00	.00	1.0 6 0
7020	2 0 0	1 26.	.00	.00	1.0 6 0
7021	2 0 0	1 26.	.00	.00	1.0 6 0
7022	2 0 0	1 26.	.00	.00	1.0 6 0
7023	2 0 0	1 24.	.00	.00	1.0 6 0
7024	2 0 0	1 26.	.00	.00	1.0 6 0
7025	2 0 0	1 32.	.00	.00	1.0 6 0
7026	2 0 0	1 26.	.00	.00	1.0 6 0
7027	2 0 0	1 71.	.00	.00	1.0 6 0
7028	2 0 0	1 26.	.00	.00	1.0 6 0
7029	2 0 0	1 26.	.00	.00	1.0 6 0
7030	2 0 0	1 71.	.00	.00	1.0 6 0
7031	2 0 0	1 26.	.00	.00	1.0 6 0
7032	2 0 0	1 26.	.00	.00	1.0 6 0
7033	2 0 0	1 26.	.00	.00	1.0 6 0
7034	2 0 0	1 26.	.00	.00	1.0 6 0
7035	2 0 0	1 26.	.00	.00	1.0 6 0
7041	2 0 0	1 26.	.00	.00	1.0 6 0
7042	2 0 0	1 26.	.00	.00	1.0 6 0
7043	2 0 0	1 26.	.00	.00	1.0 6 0
7044	2 0 0	1 26.	.00	.00	1.0 6 0
7045	2 0 0	1 26.	.00	.00	1.0 6 0
7046	2 0 0	1 26.	.00	.00	1.0 6 0
7047	2 0 0	1 26.	.00	.00	1.0 6 0
7048	2 0 0	1 26.	.00	.00	1.0 6 0
7049	2 0 0	1 26.	.00	.00	1.0 6 0
7050	2 0 0	1 26.	.00	.00	1.0 6 0
7051	2 0 0	1 26.	.00	.00	1.0 6 0
7052	2 0 0	1 26.	.00	.00	1.0 6 0
7053	2 0 0	1 26.	.00	.00	1.0 6 0
7054	2 0 0	1 26.	.00	.00	1.0 6 0
7055	2 0 0	1 26.	.00	.00	1.0 6 0
7056	2 0 0	1 26.	.00	.00	1.0 6 0
7057	2 0 0	1 26.	.00	.00	1.0 6 0
7058	2 0 0	1 26.	.00	.00	1.0 6 0
7059	2 0 0	1 71.	.00	.00	1.0 6 0
7060	2 0 0	1 71.	.00	.00	1.0 6 0
7061	2 0 0	1 71.	.00	.00	1.0 6 0
7062	2 0 0	1 71.	.00	.00	1.0 6 0
7063	2 0 0	1 71.	.00	.00	1.0 6 0





7223	1	5.5	0.00	0.00	1.00	4.00
7301	1	24.0	0.00	0.00	0.03	4.00
7302	1	20.0	0.00	0.00	0.03	4.00
7303	1	20.0	0.00	0.00	0.00	1.00
7304	0	24.0	0.00	0.00	0.00	1.00
7305	2	0.0	0.00	0.00	0.00	1.00
7306	2	0.0	0.00	0.00	0.00	1.00
7307	2	0.0	0.00	0.00	0.00	1.00
7308	4	0.0	0.00	0.00	0.00	1.00
7309	2	0.0	0.00	0.00	0.00	1.00
7310	2	0.0	0.00	0.00	0.00	1.00
7311	2	0.0	0.00	0.00	0.00	1.00
7312	2	0.0	0.00	0.00	0.00	1.00
7313	2	0.0	0.00	0.00	0.00	1.00
7314	2	0.0	0.00	0.00	0.00	1.00
7315	2	0.0	0.00	0.00	0.00	1.00
7316	2	0.0	0.00	0.00	0.00	1.00
7317	2	0.0	0.00	0.00	0.00	1.00
7318	2	0.0	0.00	0.00	0.00	1.00
7319	2	0.0	0.00	0.00	0.00	1.00
7320	2	0.0	0.00	0.00	0.00	1.00
7321	4	0.0	0.00	0.00	0.00	1.00
7322	3	0.0	0.00	0.00	0.00	1.00
7323	2	0.0	0.00	0.00	0.00	1.00
7324	2	0.0	0.00	0.00	0.00	1.00
7325	2	0.0	0.00	0.00	0.00	1.00
7326	2	0.0	0.00	0.00	0.00	1.00
7327	2	0.0	0.00	0.00	0.00	1.00
7328	2	0.0	0.00	0.00	0.00	1.00
7329	2	0.0	0.00	0.00	0.00	1.00
7330	4	0.0	0.00	0.00	0.00	1.00
7331	2	0.0	0.00	0.00	0.00	1.00
7332	2	0.0	0.00	0.00	0.00	1.00
7333	2	0.0	0.00	0.00	0.00	1.00
7334	2	0.0	0.00	0.00	0.00	1.00
7335	3	0.0	0.00	0.00	0.00	1.00
7336	3	0.0	0.00	0.00	0.00	1.00
7337	3	0.0	0.00	0.00	0.00	1.00
7338	2	0.0	0.00	0.00	0.00	1.00
7339	3	0.0	0.00	0.00	0.00	1.00
7340	3	0.0	0.00	0.00	0.00	1.00
7341	2	0.0	0.00	0.00	0.00	1.00
7342	2	0.0	0.00	0.00	0.00	1.00
7343	2	0.0	0.00	0.00	0.00	1.00
7344	2	0.0	0.00	0.00	0.00	1.00
7345	2	0.0	0.00	0.00	0.00	1.00
7346	2	0.0	0.00	0.00	0.00	1.00
7347	2	0.0	0.00	0.00	0.00	1.00
7348	2	0.0	0.00	0.00	0.00	1.00
7349	2	0.0	0.00	0.00	0.00	1.00
7350	2	0.0	0.00	0.00	0.00	1.00
7351	2	0.0	0.00	0.00	0.00	1.00
7352	2	0.0	0.00	0.00	0.00	1.00
7353	2	0.0	0.00	0.00	0.00	1.00
7354	2	0.0	0.00	0.00	0.00	1.00
7355	2	0.0	0.00	0.00	0.00	1.00
7356	2	0.0	0.00	0.00	0.00	1.00
7357	2	0.0	0.00	0.00	0.00	1.00
7358	2	0.0	0.00	0.00	0.00	1.00
7359	2	0.0	0.00	0.00	0.00	1.00
7360	2	0.0	0.00	0.00	0.00	1.00
7361	2	0.0	0.00	0.00	0.00	1.00
7362	2	0.0	0.00	0.00	0.00	1.00
7363	2	0.0	0.00	0.00	0.00	1.00
7364	2	0.0	0.00	0.00	0.00	1.00





8013	1 0 0	1 71.	.00	.10 9 0
8014	1 0 0	1 71.	.00	.10 9 0
8015	1 0 0	1 71.	.00	.10 9 0
8021	1 0 0	1 71.	.00	.10 9 0
8022	1 0 0	1 71.	.00	.10 9 0
8023	1 0 0	1 71.	.00	.10 9 0
8024	1 0 0	1 71.	.00	.10 9 0
8025	1 0 0	1 71.	.00	.10 9 0
8026	1 0 0	1 71.	.00	.10 9 0
8031	1 0 0	1 71.	.00	.10 9 0
8032	1 0 0	1 71.	.00	.10 9 0
8033	1 0 0	1 71.	.00	.10 9 0
8034	1 0 0	1 71.	.00	.10 9 0
8041	1 0 0	1 71.	.00	.10 9 0
8042	1 0 0	1 71.	.00	.10 9 0
8043	1 0 0	1 71.	.00	.10 9 0
8044	1 0 0	1 71.	.00	.10 9 0
8045	1 0 0	1 71.	.00	.10 9 0
8046	1 0 0	1 71.	.00	.10 9 0
8051	1 0 0	1 71.	.00	.10 9 0
8052	1 0 0	1 71.	.00	.10 9 0
8053	1 0 0	1 71.	.00	.10 9 0
8054	1 0 0	1 71.	.00	.10 9 0
8055	1 0 0	1 71.	.00	.10 9 0
8056	1 0 0	1 71.	.00	.10 9 0
8057	1 0 0	1 71.	.00	.10 9 0
8061	1 0 0	1 71.	.00	.10 9 0
8062	1 0 0	1 71.	.00	.10 9 0
8063	1 0 0	1 71.	.00	.10 9 0
8064	1 0 0	1 71.	.00	.10 9 0
8065	1 0 0	1 71.	.00	.10 9 0
8066	1 0 0	1 71.	.00	.10 9 0
8067	1 0 0	1 71.	.00	.10 9 0
8068	1 0 0	1 71.	.00	.10 9 0
8069	1 0 0	1 71.	.00	.10 9 0
8070	1 0 0	1 71.	.00	.10 9 0
8071	1 0 0	1 71.	.00	.10 9 0
8072	1 0 0	1 71.	.00	.10 9 0
8073	1 0 0	1 71.	.00	.10 9 0
8074	1 0 0	1 71.	.00	.10 9 0
8081	1 0 0	1 71.	.00	.10 9 0
8082	1 0 0	1 71.	.00	.10 9 0
8083	1 0 0	1 71.	.00	.10 9 0
8091	1 0 0	1 71.	.00	.10 9 0
8092	1 0 0	1 71.	.00	.10 9 0
8093	1 0 0	1 71.	.00	.10 9 0
8094	1 0 0	1 71.	.00	.10 9 0
8095	1 0 0	1 71.	.00	.10 9 0
8096	1 0 0	1 71.	.00	.10 9 0
8097	1 0 0	1 71.	.00	.10 9 0
8098	1 0 0	1 71.	.00	.10 9 0
8101	1 0 0	1 26.	.00	.10 9 0
8102	1 0 0	1 26.	.00	.10 9 0
8103	1 0 0	1 71.	.00	.10 9 0
8104	1 0 0	1 71.	.00	.10 9 0
8105	1 0 0	1 71.	.00	.10 9 0
8106	1 0 0	1 71.	.00	.10 9 0
8107	1 0 0	1 71.	.00	.10 9 0
8201	1 0 0	1 43.	.00	.10 9 0
8202	1 0 0	1 43.	.00	.10 9 0



9022	1	0	0	2	26.	.00	.00	.8010
9023	1	0	0	2	26.	.00	.00	.8010
9024	1	0	0	2	26.	.00	.00	.8010
9031	1	0	0	2	29.	.00	.00	.8010
9032	1	0	0	2	29.	.00	.00	.8010
9041	1	0	0	2	26.	.00	.00	1.0100
9042	1	0	0	2	26.	.00	.00	1.0100
9101	1	0	0	2	29.	.00	.00	1.0100
9102	1	0	0	2	29.	.00	.00	1.0100
9111	2	0	0	1	85.	.00	.00	.8010
9112	2	0	0	1	85.	.00	.00	.8010
9113	1	0	0	1	85.	.00	.00	.8010
9114	1	0	0	1	85.	.00	.00	.8010
9121	1	0	0	1	29.	.00	.00	.8010
9122	1	0	0	1	29.	.00	.00	.8010
9123	1	0	0	1	29.	.00	.00	.8010
9124	1	0	0	1	29.	.00	.00	.8010
9125	1	0	0	1	29.	.00	.00	1.0100
9126	4	0	0	1	29.	.00	.00	1.0100
9127	1	0	0	1	29.	.00	.00	.8010
9131	1	0	0	1	54.	.00	.00	1.0100
9132	1	0	0	1	54.	.00	.00	1.0100
9133	1	0	0	1	110.	.00	.00	1.0100
9141	1	0	0	1	54.	.00	.00	1.0100
9142	1	0	0	1	54.	.00	.00	1.0100
9143	1	0	0	1	110.	.00	.00	1.0100
9151	1	0	0	1	54.	.00	.00	1.0100
9152	1	0	0	1	54.	.00	.00	1.0100
9153	1	0	0	1	54.	.00	.00	1.0100
9154	1	0	0	1	54.	.00	.00	1.0100
9155	1	0	0	1	54.	.00	.00	1.0100
9161	1	0	0	1	404.	.00	.00	.0010
9162	1	0	0	1	404.	.00	.00	.0010
9163	1	0	0	1	404.	.00	.00	.0010
9164	1	0	0	1	404.	.00	.00	.0010
9165	1	0	0	1	404.	.00	.00	.0010
9166	1	0	0	1	404.	.00	.00	.0010
9201	0	0	0	0	27.	.00	.00	1.0100
9202	1	0	0	1	23.	.00	.00	1.0100
9203	0	0	4	0	23.	.00	.00	1.0100
9204	0	0	4	0	23.	.00	.00	.0510
9205	0	0	4	0	23.	.00	.00	.0510
9206	1	0	0	1	23.	.00	.00	1.0100
9207	1	0	0	1	23.	.00	.00	1.0100
9211	1	0	0	1	32.	.00	.00	1.0100
9212	1	0	0	1	32.	.00	.00	1.0100
9213	1	0	0	1	32.	.00	.00	1.0100
9214	1	0	0	1	32.	.00	.00	1.0100
9215	1	0	0	1	32.	.00	.00	1.0100
9216	1	0	0	1	32.	.00	.00	1.0100
9217	1	0	0	1	32.	.00	.00	1.0100
9218	1	0	0	1	32.	.00	.00	1.0100
9219	1	0	0	1	32.	.00	.00	1.0100
9220	1	0	0	1	32.	.00	.00	1.0100
9221	1	0	0	1	32.	.00	.00	1.0100
9222	1	0	0	1	32.	.00	.00	1.0100
9223	1	0	0	1	32.	.00	.00	1.0100
9231	1	0	0	1	32.	.00	.00	1.0100
9236	1	0	0	1	32.	.00	.00	1.0100



[illegible]



Figure A-3. VAMERGE Line Printer Output for ASALT Benchmark

There are 71 pages (A-34 through A-104) in this copy of line printer output from the execution of Program VAMERGE for the ASALT Benchmark.

VIEW NUMBER 1  
AZ = 0 EL = 0  
REVERSED  
NUMBER OF COMPONENTS  
TOTAL CRITICAL  
1300 66  
FLUX TABLE  
TIME (SEC.) FLUX (K/SG.(CM.)  
10.00 10000.0

PRESENTED AREAS AND TRUE COMPONENT VULNERABLE AREAS (SQUARE FEET) PER TIME INCREMENT

INDEX	COMPONENT NAME	PRESENTED AREA	1.00	1.50	2.00	TIME INCREMENTS	4.00	6.00	10.00	20.00
1	HEAD	.50000	.0000	.2500	.2500	.5000	.5000	.5000	.5000	.5000
2	THORAX	1.00000	.0000	.0000	.0000	.2500	.2500	.2500	.2500	.2500
3	ABDOMEN	.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
4	PELVIS	1.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
5	LEFT ARM	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
6	RITE ARM	.75000	.0000	.0000	.0000	.2500	.2500	.2500	.2500	.2500
7	LEFT LEG	.50000	.0000	.0000	.0000	.2500	.2500	.2500	.2500	.2500
8	RITE LEG	.75000	.0000	.0000	.0000	.2500	.2500	.2500	.2500	.2500
9	STK GRIP	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10	STK SENS	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11	STK YOKE	1.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
12	LFT STAR	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
13	RHT STAR	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
14	M1 FLUID	1.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
15	M1 MANIF	3504	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
16	M1 FILTR	3505	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
17	M1 COOLR	3506	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
18	M1 PUMP	3511	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
19	M1 PRESF	3514	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
20	M1 PRESR	3515	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
21	M2 FLUID	3603	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
22	M2 MANIF	3604	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
23	M2 FILTR	3605	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
24	M2 COOLR	3606	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
25	M2 PUMP	3611	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
26	M2 PRESF	3614	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
27	M2 PRESR	3615	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
28	M1 FLUID	3877	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
29	FUEL 1-A	4004	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
30	FUEL 1-B	4005	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
31	FUEL 1-C	4006	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
32	FUEL 1-D	4007	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
33	FUEL 1-E	4008	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
34	FUEL 2-A	4014	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
35	FUEL 2-B	4015	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
36	FUEL 2-C	4016	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
37	FUEL 2-D	4017	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
38	FUEL 2-E	4018	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
39	FUEL 3-A	4024	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
40	FUEL 3-B	4025	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
41	FUEL 3-C	4026	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
42	FUEL 3-D	4027	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
43	FUEL 3-E	4028	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
44	FUEL 4-A	4034	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
45	FUEL 4-B	4035	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
46	FUEL 4-C	4036	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
47	FUEL 4-D	4037	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
48	FUEL 4-E	4038	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
49	LFT FLIN	4215	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
50	RHT FLIN	4216	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
51	LFT FUEL	4221	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

52	RMT FUEL	4222	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
53	VEAT TAX	4602	1.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
54	UYISEN	9402	1.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
55	HT EXCHG	9917	.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
56	BLD LINE	9931	1.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
57	PRI CHRG	9932	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
58	LFT CHRG	9933	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
59	RMT CHRG	9934	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
60	CARTK 1	9935	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
61	CARTK 2	9936	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
62	SUN CART	9937	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
63	HEM RKT	9938	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
64	SEAT RKT	9939	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
65	LFT CRKT	9940	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
66	RMT CRKT	9941	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

VIEW NUMBER 2  
AZ = 45.0 EL = 0.0  
REVERSED  
NO  
NUMBER OF COMPONENTS  
TOTAL CRITICAL  
1366  
66  
FLUX TABLE  
TIME (SEC.) FLUX (A/SG.CM.)  
10.00 10000.0

## PRESENTED AREAS AND TRUE COMPONENT VULNERABLE AREAS (SQUARE FEET) PER TIME INCREMENT

INDEX	COMPONENT NAME	NUMBER	PRESENTED AREA	TIME INCREMENTS					FLUX TABLE				
				1.50	2.00	4.00	6.00	8.00	10.00	10.00	10.00	10.00	20.00
1	HEAD	2001	.5000	.2500	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000
2	THORAX	2002	1.0000	.2500	.2500	.2500	.2500	.2500	.2500	.2500	.2500	.2500	.2500
3	ABDOMEN	2003	1.5000	.0000	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.7500
4	PELVIS	2004	1.2500	.2500	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.7500
5	LEFT ARM	2005	1.0000	.7500	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
6	RITE ARM	2006	.7500	.2500	.2500	.2500	.2500	.2500	.2500	.2500	.2500	.2500	.5000
7	LEFT LEG	2007	1.0000	.2500	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000
8	RITE LEG	2008	1.2500	.0000	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.7500
9	STK GRIP	3001	.2500	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10	STK SENS	3002	.2500	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11	STK YOKE	3003	.7500	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
12	LFT STAR	3137	.5000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
13	RHT STAR	3237	.5000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
14	M1 FLUID	3503	.7500	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
15	M1 MANIF	3504	.5000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
16	M1 FILTR	3505	.2500	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
17	M1 COOLR	3506	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
18	M1 PUMP	3511	.5000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
19	M1 PRESF	3514	.2500	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
20	M1 PRESR	3515	.2500	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
21	M2 FLUID	3603	1.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
22	M2 MANIF	3604	.5000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
23	M2 FILTR	3605	.5000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
24	M2 COOLR	3606	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
25	M2 PUMP	3611	.2500	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
26	M2 PRESF	3614	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
27	M2 PRESR	3615	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
28	M1 FLUID	3617	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
29	FUEL 1-A	4004	6.0000	2.2500	3.5000	3.5000	3.7500	3.7500	3.7500	3.7500	3.7500	3.7500	4.5000
30	FUEL 1-B	4005	3.2500	1.2500	2.7500	2.7500	2.7500	2.7500	2.7500	2.7500	2.7500	2.7500	3.2500
31	FUEL 1-C	4006	3.2500	.0000	1.5000	2.2500	3.2500	3.2500	3.2500	3.2500	3.2500	3.2500	3.2500
32	FUEL 1-D	4007	3.2500	3.0000	3.2500	3.2500	3.2500	3.2500	3.2500	3.2500	3.2500	3.2500	3.2500
33	FUEL 1-E	4008	6.2500	5.0000	5.0000	5.0000	5.2500	5.2500	5.2500	5.2500	5.2500	5.2500	6.2500
34	FUEL 2-A	4014	2.2500	.0000	.7500	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
35	FUEL 2-B	4015	4.5000	.0000	1.5000	1.5000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000
36	FUEL 2-C	4016	2.2500	.0000	.5000	.5000	.7500	.7500	.7500	.7500	.7500	.7500	1.0000
37	FUEL 2-D	4017	4.5000	.0000	1.0000	1.0000	1.5000	1.7500	1.7500	1.7500	1.7500	1.7500	2.0000
38	FUEL 2-E	4018	4.2500	.0000	1.5000	1.7500	1.7500	1.7500	1.7500	1.7500	1.7500	1.7500	1.7500
39	FUEL 3-A	4024	3.7500	.0000	.2500	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.7500
40	FUEL 3-B	4025	2.2500	.0000	.0000	.0000	.2500	.5000	.5000	.5000	.5000	.5000	.7500
41	FUEL 3-C	4026	4.2500	.0000	.0000	.5000	1.0000	1.7500	1.7500	1.7500	1.7500	1.7500	2.0000
42	FUEL 3-D	4027	2.5000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	1.2500
43	FUEL 3-E	4028	3.7500	.0000	1.7500	1.7500	1.7500	1.7500	1.7500	1.7500	1.7500	1.7500	1.7500
44	FUEL 4-A	4034	1.0000	.0000	1.5000	2.5000	4.5000	4.5000	4.5000	4.5000	4.5000	4.5000	4.7500
45	FUEL 4-B	4035	4.2500	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	1.5000
46	FUEL 4-C	4036	4.7500	.0000	.7500	.7500	1.2500	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000
47	FUEL 4-D	4037	4.7500	.0000	.7500	2.0000	2.2500	2.5000	2.5000	2.5000	2.5000	2.5000	3.0000
48	FUEL 4-E	4038	5.5000	2.0000	3.7500	3.7500	3.7500	3.7500	3.7500	3.7500	3.7500	3.7500	3.7500
49	LFT FLIN	4215	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
50	RHT FLIN	4216	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
51	LFT FUEL	4221	.2500	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000



VIEW NUMBER 3 REVERSE  
 AZ = 90.0 EL = 0.0  
 NUMBER OF COMPONENTS  
 TOTAL CRITICAL  
 1366 66

PRESENTED AREAS AND TRUE COMPONENT VULNERABLE AREAS (SQUARE FEET) PER TIME INCREMENT

INDEX	COMPONENT NAME	NUMBER	PRESENTED AREA	NUMBER OF COMPONENTS					FLUX TABLE				
				50	1.00	1.50	2.00	4.00	6.00	8.00	10.00	20.00	
1	HEAD	2001	.75000	.5000	.7500	.7500	.7500	.7500	.7500	.7500	.7500	.7500	
2	THORAX	2002	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
3	ABDOMEN	2003	1.00000	.2500	.7500	.7500	.7500	.7500	.7500	.7500	.7500	.7500	
4	PELVIS	2004	.25000	.2500	.2500	.2500	.2500	.2500	.2500	.2500	.2500	.2500	
5	LEFT ARM	2005	1.00000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
6	RITE ARM	2006	.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
7	LEFT LEG	2007	1.50000	.5000	.7500	1.2500	1.2500	1.5000	1.5000	1.5000	1.5000	1.5000	
8	RITE LEG	2008	1.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
9	STK GRIP	3001	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
10	STK SENS	3002	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
11	STK YUKE	3003	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
12	LFT STAB	3137	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
13	RHT STAB	3237	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
14	M1 FLUID	3503	.50000	.0000	.0000	.0000	.0000	.5000	.5000	.5000	.5000	.5000	
15	M1 MANIF	3504	.50000	.0000	.0000	.0000	.0000	.5000	.5000	.5000	.5000	.5000	
16	M1 FLTR	3505	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
17	M1 COOLR	3506	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
18	M1 PUMP	3511	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
19	M1 PRES	3514	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
20	M1 PRES	3515	.50000	.0000	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000	
21	M2 FLUID	3603	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
22	M2 MANIF	3604	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
23	M2 FLTR	3605	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
24	M2 COOLR	3606	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
25	M2 PUMP	3611	1.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
26	M2 PRES	3614	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
27	M2 PRES	3615	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
28	M1 FLUID	3877	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
29	FUEL 1-A	4004	3.00000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	
30	FUEL 1-B	4005	3.00000	.5000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	
31	FUEL 1-C	4006	3.00000	.0000	1.2500	2.0000	2.0000	3.0000	3.0000	3.0000	3.0000	3.0000	
32	FUEL 1-D	4007	3.00000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	
33	FUEL 1-E	4008	5.50000	5.5000	5.5000	5.5000	5.5000	5.5000	5.5000	5.5000	5.5000	5.5000	
34	FUEL 2-A	4014	.0000	1.0000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	
35	FUEL 2-B	4015	3.00000	.0000	1.5000	1.5000	1.5000	2.0000	2.0000	2.5000	3.0000	3.0000	
36	FUEL 2-C	4016	1.50000	.0000	.5000	.5000	.5000	1.2500	1.2500	1.2500	1.2500	1.2500	
37	FUEL 2-D	4017	3.00000	1.5000	1.7500	1.7500	1.7500	3.0000	3.0000	3.0000	3.0000	3.0000	
38	FUEL 2-E	4018	3.00000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	
39	FUEL 3-A	4024	2.50000	.0000	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000	
40	FUEL 3-B	4025	1.50000	.0000	.2500	.2500	.2500	.7500	.7500	1.0000	1.0000	1.5000	
41	FUEL 3-C	4026	3.00000	.0000	.2500	.2500	.2500	.7500	.7500	1.0000	1.0000	1.5000	
42	FUEL 3-D	4027	1.50000	.0000	.0000	.0000	.0000	.0000	.5000	.5000	.5000	1.5000	
43	FUEL 3-E	4028	3.00000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	
44	FUEL 4-A	4034	10.75000	.0000	.7500	.7500	.7500	1.0000	1.0000	1.0000	1.2500	1.5000	
45	FUEL 4-B	4035	4.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
46	FUEL 4-C	4036	4.25000	.0000	1.7500	1.7500	1.7500	1.7500	1.7500	1.7500	2.0000	2.2500	
47	FUEL 4-D	4037	4.25000	.5000	3.2500	3.2500	3.2500	3.7500	3.7500	3.7500	3.7500	3.7500	
48	FUEL 4-E	4038	5.50000	4.2500	4.2500	4.2500	4.2500	5.2500	5.5000	5.5000	5.5000	5.5000	
49	LFT FLIA	4215	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
50	RHT FLIA	4216	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
51	LFT FUEL	4221	.25000	.0000	.2500	.2500	.2500	.2500	.2500	.2500	.2500	.2500	

52	RMT FUEL	4222	.0000	.0000	.0000	.0000	.0000	.0000
53	VENT TANK	4602	.0000	.7500	.7500	2.5000	2.5000	2.5000
54	OXYGEN	9402	.0000	.0000	.0000	.7500	1.2500	1.2500
55	WT EXCHG	9917	.0000	.0000	.0000	.0000	.0000	.0000
56	HLD LINE	9931	.0000	.0000	.0000	.0000	.0000	.0000
57	PMT CMRG	9932	.0000	.0000	.0000	.0000	.0000	.0000
58	LFT CMRG	9933	.0000	.0000	.0000	.0000	.0000	.0000
59	PMT CMRG	9934	.0000	.0000	.0000	.0000	.0000	.0000
60	CARTR 1	9935	.0000	.0000	.0000	.0000	.0000	.0000
61	CARTR 2	9936	.0000	.0000	.0000	.0000	.0000	.0000
62	SUN CART	9937	.0000	.0000	.0000	.0000	.0000	.0000
63	REM RMT	9938	.0000	.0000	.0000	.0000	.0000	.0000
64	SEAT RKT	9939	.0000	.0000	.0000	.2500	.2500	.2500
65	LFT CRKT	9940	.0000	.0000	.0000	.0000	.0000	.0000
66	RMT CRKT	9941	.0000	.0000	.0000	.2500	.2500	.2500

PRESENTED AREAS AND TRUE COMPONENT VULNERABLE AREAS (SQUARE FEET) PER TIME INCREMENT

INDEX	COMPONENT NAME	NUMBER	PRESENTED	AREA	1.00	1.50	2.00	TIME INCREMENTS				8.00	10.00	20.00
1	HEAD	2001	.50000	.2500	.5000	.5000	.5000	2.00	4.00	6.00	8.00	10.00	20.00	
2	THORAX	2002	1.00000	.2500	.5000	.7500	.7500	.5000	1.0000	.5000	.5000	.5000	.5000	
3	ABDOMEN	2003	1.50000	.0000	.0000	.2500	.2500	.2500	.2500	.5000	.5000	.5000	.5000	
4	PELVIS	2004	1.25000	.0000	.2500	.2500	.2500	.2500	.5000	.5000	.5000	.5000	.7500	
5	LEFT ARM	2005	1.25000	1.0000	1.2500	1.2500	1.2500	1.2500	1.2500	1.2500	1.2500	1.2500	1.2500	
6	RITE ARM	2006	.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
7	LEFT LEG	2007	1.25000	.5000	.7500	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
8	RITE LEG	2008	1.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.2500	
9	STR GRIP	3001	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
10	STR SENS	3002	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
11	STR YOKE	3003	1.00000	.0000	.0000	.0000	.0000	.0000	.0000	.5000	.5000	.5000	.5000	
12	LFT STAR	3137	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.5000	
13	RHT STAR	3237	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
14	M1 FLUID	3503	.75000	.0000	.0000	.0000	.0000	.0000	.2500	.5000	.7500	.7500	.7500	
15	M1 MANIF	3504	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.5000	.5000	.5000	.5000	
16	M1 FILTR	3505	.50000	.0000	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000	
17	M1 COCLR	3506	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
18	M1 PUMP	3511	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
19	M1 PRESF	3514	.75000	.0000	.2500	.2500	.2500	.2500	.2500	.2500	.2500	.2500	.2500	
20	M1 PRESR	3515	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
21	M2 FLUID	3603	1.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
22	M2 MANIF	3604	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
23	M2 FILTR	3605	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
24	M2 COCLR	3606	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
25	M2 PUMP	3611	.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
26	M2 PRESF	3614	.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
27	M2 PRESR	3615	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
28	M1 FLUID	3677	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
29	FUEL 1-A	4004	6.00000	.0000	.0000	.0000	.0000	.0000	.2500	.2500	.2500	.2500	.2500	
30	FUEL 1-B	4005	3.25000	.0000	.7500	1.7500	1.7500	1.7500	1.7500	1.7500	2.0000	2.0000	2.0000	
31	FUEL 1-C	4006	3.25000	.0000	.7500	.7500	.7500	1.5000	1.5000	1.7500	2.0000	2.0000	2.0000	
32	FUEL 1-D	4007	3.25000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	
33	FUEL 1-E	4008	6.25000	3.5000	3.7500	3.7500	3.7500	3.7500	3.7500	4.0000	4.0000	4.0000	4.0000	
34	FUEL 2-A	4014	2.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
35	FUEL 2-B	4015	4.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
36	FUEL 2-C	4016	2.25000	.0000	.0000	.0000	.0000	.0000	.2500	.5000	.5000	.5000	1.0000	
37	FUEL 2-D	4017	4.50000	.5000	1.2500	1.2500	1.2500	1.2500	1.2500	1.5000	2.2500	2.2500	2.2500	
38	FUEL 2-E	4018	4.25000	.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	3.0000	
39	FUEL 3-A	4024	3.75000	.0000	.0000	.0000	.0000	.2500	.2500	.2500	.2500	.2500	.5000	
40	FUEL 3-B	4025	2.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.2500	.2500	.5000	
41	FUEL 3-C	4026	4.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
42	FUEL 3-D	4027	2.50000	.0000	.0000	.0000	.0000	.0000	.2500	.2500	.2500	.2500	.2500	
43	FUEL 3-E	4028	3.75000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	
44	FUEL 4-A	4034	10.00000	.0000	.0000	3.7500	5.2500	6.5000	7.2500	7.2500	7.5000	7.5000	7.5000	
45	FUEL 4-B	4035	4.25000	.0000	.0000	.5000	.7500	1.2500	1.2500	1.2500	1.2500	1.2500	1.5000	
46	FUEL 4-C	4036	4.75000	.0000	1.5000	1.7500	2.0000	2.0000	2.0000	2.0000	2.0000	2.5000	2.7500	
47	FUEL 4-D	4037	4.75000	.0000	1.0000	1.5000	2.5000	2.7500	3.2500	3.2500	3.2500	3.2500	3.2500	
48	FUEL 4-E	4038	5.50000	2.2500	2.2500	2.5000	2.5000	3.2500	3.2500	3.2500	3.2500	4.0000	5.0000	
49	LFT FLIN	4215	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
50	RHT FLIN	4216	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
51	LFT FUEL	4224	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	



52	MAT FUEL	4222	.0000	.0000	.0000	.0000	.0000
53	VENT TNR	4602	.0000	.0000	.0000	.0000	.0000
54	OXYGEN	9402	.0000	.0000	.0000	.0000	.0000
55	MT EACMG	9917	.0000	.0000	.0000	.0000	.0000
56	BLD LINE	9931	.0000	.0000	.0000	.0000	.0000
57	PRI CMRG	9932	.0000	.0000	.0000	.0000	.0000
58	LFT CMRG	9933	.0000	.0000	.0000	.0000	.0000
59	RHT CMRG	9934	.0000	.0000	.0000	.0000	.0000
60	CARTR 1	9935	.0000	.0000	.0000	.0000	.0000
61	CARTR 2	9936	.0000	.0000	.0000	.0000	.0000
62	GUN CART	9937	.0000	.0000	.0000	.0000	.0000
63	REM RNT	9938	.0000	.0000	.0000	.0000	.0000
64	SEAT KAT	9939	.0000	.0000	.0000	.0000	.0000
65	LFT CRKT	9940	.0000	.0000	.0000	.0000	.0000
66	RHT CRKT	9941	.0000	.0000	.0000	.0000	.0000

VIEW NUMBER 5  
AZ = 45.0 EL = 45.0

REVERSED  
NO

NUMBER OF PRESENTED  
1500  
64

TIME IN  
15.00

PRESENTED AREAS AND THEIR COMPONENT VULNERABLE AREAS ARE HERE PRESENTED

INDEX	COMPONENT NAME	NUMBER	PRESENTED AREA	TIME IN
1	HEAD	2001	.5000	.5000
2	THORAX	2002	1.0000	.5000
3	ABDOMEN	2003	.7500	.2500
4	PELVIS	2004	1.5000	.2500
5	LEFT ARM	2005	.2500	.2500
6	RIGHT ARM	2006	.7500	.2500
7	LEFT LEG	2007	1.0000	.5000
8	RIGHT LEG	2008	1.2500	.5000
9	STK GRIP	3001	.2500	.0000
10	STK BENS	3002	.2500	.0000
11	STK YOKE	3003	.2500	.0000
12	LFT STAR	3137	.5000	.0000
13	RHT STAR	3237	.5000	.0000
14	M1 FLUID	3503	.5000	.0000
15	M1 MANIF	3504	.0000	.0000
16	M1 FILTR	3505	.5000	.0000
17	M1 COOLR	3506	.2500	.0000
18	M1 PUMP	3511	.2500	.0000
19	M1 PRESF	3514	.0000	.0000
20	M1 PRESR	3515	.2500	.0000
21	M2 FLUID	3603	.5000	.0000
22	M2 MANIF	3604	.0000	.0000
23	M2 FILTR	3605	.5000	.0000
24	M2 COOLR	3606	.2500	.0000
25	M2 PUMP	3611	.0000	.0000
26	M2 PRESF	3614	.0000	.0000
27	M2 PRESR	3615	.0000	.0000
28	M1 FLUID	3677	1.0000	.0000
29	FUEL 1-A	4004	10.0000	1.5000
30	FUEL 1-B	4005	17.5000	1.5000
31	FUEL 1-C	4006	15.0000	1.5000
32	FUEL 1-D	4007	15.0000	1.5000
33	FUEL 1-E	4008	15.0000	1.5000
34	FUEL 2-A	4014	10.0000	15.7500
35	FUEL 2-B	4015	10.0000	.0000
36	FUEL 2-C	4016	8.7500	.0000
37	FUEL 2-D	4017	8.7500	.0000
38	FUEL 2-E	4018	8.7500	.0000
39	FUEL 3-A	4024	6.2500	6.7500
40	FUEL 3-B	4025	6.2500	.0000
41	FUEL 3-C	4026	6.2500	.0000
42	FUEL 3-D	4027	6.2500	.0000
43	FUEL 3-E	4028	6.2500	.0000
44	FUEL 4-A	4034	14.0000	3.7500
45	FUEL 4-B	4035	22.2500	.0000
46	FUEL 4-C	4036	31.7500	.5000
47	FUEL 4-D	4037	31.7500	3.0000
48	FUEL 4-E	4038	29.2500	3.5000
49	LFT FLIA	4215	.0000	.0000
50	RHT FLIA	4216	.0000	.0000
51	LFT FUEL	4221	.0000	.0000

52	HMT FUEL	4222	1.00000	.0000	.0000	.0000	.0000	.0000	.0000
53	VENT TNA	4602	1.25000	.0000	.0000	.0000	.0000	.0000	.0000
54	OXYGEN	9402	1.00000	.0000	.0000	.0000	.0000	.0000	.0000
55	MT EXCHG	9917	1.25000	.0000	.0000	.0000	.0000	.0000	.0000
56	BLD LINE	9931	1.00000	.0000	.0000	.0000	.0000	.0000	.0000
57	PMI CHRG	9932	.25000	.0000	.0000	.0000	.0000	.0000	.0000
58	LFT CHRG	9933	.00000	.0000	.0000	.0000	.0000	.0000	.0000
59	HMT CHRG	9934	.00000	.0000	.0000	.0000	.0000	.0000	.0000
60	CARTN 1	9935	.25000	.0000	.0000	.0000	.0000	.0000	.0000
61	CARTN 2	9936	.25000	.0000	.0000	.0000	.0000	.0000	.0000
62	GUN CART	9937	.00000	.0000	.0000	.0000	.0000	.0000	.0000
63	REM RMT	9938	.00000	.0000	.0000	.0000	.0000	.0000	.0000
64	SEAT RMT	9939	.25000	.0000	.0000	.0000	.0000	.0000	.0000
65	LFT CRKT	9940	.00000	.0000	.0000	.0000	.0000	.0000	.0000
66	HMT CRKT	9941	.00000	.0000	.0000	.0000	.0000	.0000	.0000

VIEW NUMBER 6  
AZ = 45.0 EL = 45.0

RECEIVED  
TOTAL 1568

REPORT OF COMPARISON  
TOTAL 1568

TIME 10.00

PRESENTED AREA AND TRUE COMPONENT VOLUMES AREAS SQUARE FEET PER

INDEX	COMPONENT NAME	NUMBER	PRESENT AREA	TRUE AREA	TIME INCREMENT	TIME	AREA	TIME	AREA
1	HEAD	2001	.5000	.5000	4.00	1.00	.5000	1.00	.5000
2	THORAX	2002	.7500	.7500	.2500	1.25	.7500	1.25	.7500
3	ABDOMEN	2003	1.2500	1.2500	.7500	1.50	1.2500	1.50	1.2500
4	PELVIS	2004	1.5000	1.5000	.7500	1.75	1.5000	1.75	1.5000
5	LEFT ARM	2005	1.0000	1.0000	1.0000	2.00	1.0000	2.00	1.0000
6	RIGHT ARM	2006	.7500	.7500	.5000	1.50	.7500	1.50	.7500
7	LEFT LEG	2007	1.0000	1.0000	.7500	1.75	1.0000	1.75	1.0000
8	RIGHT LEG	2008	1.5000	1.5000	.7500	2.25	1.5000	2.25	1.5000
9	STK GRIP	3001	.2500	.2500	.0000	.25	.2500	.25	.2500
10	STK SENS	3002	.2500	.2500	.0000	.25	.2500	.25	.2500
11	STK YORE	3003	.2500	.2500	.0000	.25	.2500	.25	.2500
12	LFT STAR	3137	1.25	1.25	.0000	1.25	1.25	1.25	1.25
13	RHT STAR	3237	.75	.75	.0000	.75	.75	.75	.75
14	M1 FLUID	3503	.75	.75	.0000	.75	.75	.75	.75
15	M1 MANIF	3504	.50	.50	.0000	.50	.50	.50	.50
16	M1 FILTR	3505	.25	.25	.0000	.25	.25	.25	.25
17	M1 COULR	3506	.25	.25	.0000	.25	.25	.25	.25
18	M1 PUMP	3511	.25	.25	.0000	.25	.25	.25	.25
19	M1 PRESF	3514	.25	.25	.0000	.25	.25	.25	.25
20	M1 PRESR	3515	.25	.25	.0000	.25	.25	.25	.25
21	M2 FLUID	3603	.75	.75	.0000	.75	.75	.75	.75
22	M2 MANIF	3604	.50	.50	.0000	.50	.50	.50	.50
23	M2 FILTR	3605	.25	.25	.0000	.25	.25	.25	.25
24	M2 COULR	3606	.25	.25	.0000	.25	.25	.25	.25
25	M2 PUMP	3611	.25	.25	.0000	.25	.25	.25	.25
26	M2 PRESF	3614	.25	.25	.0000	.25	.25	.25	.25
27	M2 PRESR	3615	.25	.25	.0000	.25	.25	.25	.25
28	M1 FLUID	3877	1.00	1.00	.0000	1.00	1.00	1.00	1.00
29	FUEL 1-A	4004	.90	.90	.0000	.90	.90	.90	.90
30	FUEL 1-B	4005	1.70	1.70	.0000	1.70	1.70	1.70	1.70
31	FUEL 1-C	4006	1.70	1.70	.0000	1.70	1.70	1.70	1.70
32	FUEL 1-D	4007	1.70	1.70	.0000	1.70	1.70	1.70	1.70
33	FUEL 1-E	4008	1.70	1.70	.0000	1.70	1.70	1.70	1.70
34	FUEL 2-A	4014	.90	.90	.0000	.90	.90	.90	.90
35	FUEL 2-B	4015	.90	.90	.0000	.90	.90	.90	.90
36	FUEL 2-C	4016	.90	.90	.0000	.90	.90	.90	.90
37	FUEL 2-D	4017	1.00	1.00	.0000	1.00	1.00	1.00	1.00
38	FUEL 2-E	4018	.90	.90	.0000	.90	.90	.90	.90
39	FUEL 3-A	4024	.60	.60	.0000	.60	.60	.60	.60
40	FUEL 3-B	4025	.60	.60	.0000	.60	.60	.60	.60
41	FUEL 3-C	4026	.60	.60	.0000	.60	.60	.60	.60
42	FUEL 3-D	4027	.60	.60	.0000	.60	.60	.60	.60
43	FUEL 3-E	4028	.60	.60	.0000	.60	.60	.60	.60
44	FUEL 4-A	4034	.60	.60	.0000	.60	.60	.60	.60
45	FUEL 4-B	4035	.60	.60	.0000	.60	.60	.60	.60
46	FUEL 4-C	4036	.60	.60	.0000	.60	.60	.60	.60
47	FUEL 4-D	4037	.60	.60	.0000	.60	.60	.60	.60
48	FUEL 4-E	4038	.60	.60	.0000	.60	.60	.60	.60
49	LFT FLIN	4215	.60	.60	.0000	.60	.60	.60	.60
50	RHT FLIN	4216	.60	.60	.0000	.60	.60	.60	.60
51	LFT FUEL	4821	.60	.60	.0000	.60	.60	.60	.60



VIEW NUMBER 7  
AZ = 90.0 EL = 45.0

REVERSED  
NO

NUMBER 1 COMPONENTS  
TOTAL CRITICAL  
46

TIME (SEC.)  
10.0

PER  
W.S.  
0.0

PRESENTED AREA AND TRUE COMPONENT VOLUMES PER SQUARE FEET PER

INDEX	COMPONENT NAME	NUMBER	PRESENTED AREA	TRUE COMPONENT VOLUME	AREA PER SQUARE FEET	TIME INCREMENT
1	HEAD	2001	.7500	.7500	.7500	.7500
2	TWOBA	2002	1.0000	.7500	.7500	.7500
3	ABDOMEN	2003	1.0000	.7500	.7500	.7500
4	PELVIS	2004	.7500	.2500	.2500	.2500
5	LEFT ARM	2005	.5000	.2500	.2500	.2500
6	RIGHT ARM	2006	.7500	.2500	.2500	.2500
7	LEFT LEG	2007	2.0000	.7500	.7500	.7500
8	RIGHT LEG	2008	2.0000	.7500	.7500	.7500
9	STK GRIP	3001	.0000	.0000	.0000	.0000
10	STK SENS	3002	.0000	.0000	.0000	.0000
11	STK YOKE	3003	.0000	.0000	.0000	.0000
12	LFT STAB	3137	.5000	.0000	.0000	.0000
13	RHT STAB	3237	.5000	.0000	.0000	.0000
14	M1 FLUID	3503	.7500	.2500	.2500	.2500
15	M1 MANIF	3504	.5000	.2500	.2500	.2500
16	M1 FILTR	3505	.5000	.2500	.2500	.2500
17	M1 CCLR	3506	.5000	.2500	.2500	.2500
18	M1 PUMP	3511	.2500	.2500	.2500	.2500
19	M1 PRESF	3514	.0000	.0000	.0000	.0000
20	M1 PRESR	3515	.2500	.2500	.2500	.2500
21	M2 FLUID	3603	1.0000	.2500	.2500	.2500
22	M2 MANIF	3604	.5000	.2500	.2500	.2500
23	M2 FILTR	3605	.2500	.2500	.2500	.2500
24	M2 CCLR	3606	.2500	.2500	.2500	.2500
25	M2 PUMP	3611	.7500	.2500	.2500	.2500
26	M2 PRESF	3614	.2500	.2500	.2500	.2500
27	M2 PRESR	3615	.0000	.0000	.0000	.0000
28	M1 FLUID	3877	1.0000	.2500	.2500	.2500
29	FUEL 1-A	4004	7.0000	.2500	.2500	.2500
30	FUEL 1-B	4005	16.0000	.2500	.2500	.2500
31	FUEL 1-C	4006	18.0000	.2500	.2500	.2500
32	FUEL 1-D	4007	15.2500	.2500	.2500	.2500
33	FUEL 1-E	4008	15.0000	.2500	.2500	.2500
34	FUEL 2-A	4014	9.0000	.2500	.2500	.2500
35	FUEL 2-B	4015	9.0000	.2500	.2500	.2500
36	FUEL 2-C	4016	9.0000	.2500	.2500	.2500
37	FUEL 2-D	4017	9.0000	.2500	.2500	.2500
38	FUEL 2-E	4018	9.0000	.2500	.2500	.2500
39	FUEL 3-A	4024	9.0000	.2500	.2500	.2500
40	FUEL 3-B	4025	9.0000	.2500	.2500	.2500
41	FUEL 3-C	4026	9.0000	.2500	.2500	.2500
42	FUEL 3-D	4027	7.7500	.2500	.2500	.2500
43	FUEL 3-E	4028	7.7500	.2500	.2500	.2500
44	FUEL 4-A	4034	18.5000	.2500	.2500	.2500
45	FUEL 4-B	4035	24.5000	.2500	.2500	.2500
46	FUEL 4-C	4036	21.0000	.2500	.2500	.2500
47	FUEL 4-D	4037	25.0000	.2500	.2500	.2500
48	FUEL 4-E	4038	25.0000	.2500	.2500	.2500
49	LFT FLIN	4215	14.0000	.2500	.2500	.2500
50	RHT FLIN	4216	14.0000	.2500	.2500	.2500
51	LFT FUEL	4221	14.0000	.2500	.2500	.2500

[illegible]

0.50 = 13 0.50 = 20  
135.0 61 = 45.0  
144 4714

三

[illegible]

10

FILED  
20.

PRESENTED ARE THE "HIGH CONCENTRATION" AREAS (SHAKE EVIDENCE)

INDEX	COMPONENT	NAME	NUMBER	PRICE	QTY	TOTAL	TIME	INCH
1	HEAD		2001	1.00	1	1.00	1.00	1.00
2	THORAX		2002	.75	1	.75	.75	.75
3	ABDOEN		2003	1.25	1	1.25	1.25	1.25
4	PELVIS		2004	.75	1	.75	.75	.75
5	LEFT ARM		2005	.75	1	.75	.75	.75
6	RITE ARM		2006	.75	1	.75	.75	.75
7	LEFT LEG		2007	.75	1	.75	.75	.75
8	RITE LEG		2008	.75	1	.75	.75	.75
9	STR GRIP		3001	.75	1	.75	.75	.75
10	STR BENS		3002	.75	1	.75	.75	.75
11	STR YORE		3003	.75	1	.75	.75	.75
12	LFT STAR		3137	.75	1	.75	.75	.75
13	RMT STAR		3237	.75	1	.75	.75	.75
14	M1 FLUID		3503	.75	1	.75	.75	.75
15	M1 MANIF		3504	.75	1	.75	.75	.75
16	M1 FILTR		3505	.75	1	.75	.75	.75
17	M1 COOLR		3506	.75	1	.75	.75	.75
18	M1 PUMP		3511	.75	1	.75	.75	.75
19	M1 PRESF		3514	.75	1	.75	.75	.75
20	M1 PRESR		3515	.75	1	.75	.75	.75
21	M2 FLUID		3603	.75	1	.75	.75	.75
22	M2 MANIF		3604	.75	1	.75	.75	.75
23	M2 FILTR		3605	.75	1	.75	.75	.75
24	M2 COOLR		3606	.75	1	.75	.75	.75
25	M2 PUMP		3611	.75	1	.75	.75	.75
26	M2 PRESF		3614	.75	1	.75	.75	.75
27	M2 PRESR		3615	.75	1	.75	.75	.75
28	M1 FLUID		3677	.75	1	.75	.75	.75
29	FUEL 1-A		4004	.75	1	.75	.75	.75
30	FUEL 1-B		4005	.75	1	.75	.75	.75
31	FUEL 1-C		4006	.75	1	.75	.75	.75
32	FUEL 1-D		4007	.75	1	.75	.75	.75
33	FUEL 1-E		4008	.75	1	.75	.75	.75
34	FUEL 2-A		4014	.75	1	.75	.75	.75
35	FUEL 2-B		4015	.75	1	.75	.75	.75
36	FUEL 2-C		4016	.75	1	.75	.75	.75
37	FUEL 2-D		4017	.75	1	.75	.75	.75
38	FUEL 2-E		4018	.75	1	.75	.75	.75
39	FUEL 3-A		4024	.75	1	.75	.75	.75
40	FUEL 3-B		4025	.75	1	.75	.75	.75
41	FUEL 3-C		4026	.75	1	.75	.75	.75
42	FUEL 3-D		4027	.75	1	.75	.75	.75
43	FUEL 3-E		4028	.75	1	.75	.75	.75
44	FUEL 4-A		4034	.75	1	.75	.75	.75
45	FUEL 4-B		4035	.75	1	.75	.75	.75
46	FUEL 4-C		4036	.75	1	.75	.75	.75
47	FUEL 4-D		4037	.75	1	.75	.75	.75
48	FUEL 4-E		4038	.75	1	.75	.75	.75
49	RMT FLIN		4215	.75	1	.75	.75	.75
50	RMT FLIN		4216	.75	1	.75	.75	.75
51	LFT FUEL		4221	.75	1	.75	.75	.75



234567890123456

VIEW NUMBER 9

REMARKS

A LOT OF COMPONENTS  
INITIAL CRITICAL  
1500 60

TIME 5.00 10.00 15.00

PRESENTED AREAS AND TRUE COMPONENT VOLUMES AREAS (CUBIC FEET) PER INCH

INDEX	COMPONENT NAME	NUMBER	PRESENTED AREA	TRUE VOLUME	TIME INCH
1	HEAD	2001	.2500	.2500	.2500
2	THORAX	2002	1.0000	1.0000	1.0000
3	ABDOMEN	2003	1.0000	1.0000	1.0000
4	PELVIS	2004	1.5000	1.5000	1.5000
5	LEFT ARM	2005	.2500	.2500	.2500
6	RIGHT ARM	2006	.2500	.2500	.2500
7	LEFT LEG	2007	.2500	.2500	.2500
8	RIGHT LEG	2008	.2500	.2500	.2500
9	STK GRIP	3001	.2500	.2500	.2500
10	STK SENS	3002	.2500	.2500	.2500
11	STK YOKE	3003	.2500	.2500	.2500
12	LFT STAR	3137	.2500	.2500	.2500
13	RHT STAR	3237	.2500	.2500	.2500
14	M1 FLUID	3503	.2500	.2500	.2500
15	M1 MANIF	3504	.2500	.2500	.2500
16	M1 FLTR	3505	.2500	.2500	.2500
17	M1 COOLR	3506	.2500	.2500	.2500
18	M1 PUMP	3511	.2500	.2500	.2500
19	M1 PRESF	3514	.2500	.2500	.2500
20	M1 PRESR	3515	.2500	.2500	.2500
21	M2 FLUID	3603	.2500	.2500	.2500
22	M2 MANIF	3604	.2500	.2500	.2500
23	M2 FLTR	3605	.2500	.2500	.2500
24	M2 COOLR	3606	.2500	.2500	.2500
25	M2 PUMP	3611	.2500	.2500	.2500
26	M2 PRESF	3614	.2500	.2500	.2500
27	M2 PRESR	3615	.2500	.2500	.2500
28	M1 FLUID	3677	.2500	.2500	.2500
29	FUEL 1-A	4004	.2500	.2500	.2500
30	FUEL 1-B	4005	.2500	.2500	.2500
31	FUEL 1-C	4006	.2500	.2500	.2500
32	FUEL 1-D	4007	.2500	.2500	.2500
33	FUEL 1-E	4008	.2500	.2500	.2500
34	FUEL 2-A	4014	.2500	.2500	.2500
35	FUEL 2-B	4015	.2500	.2500	.2500
36	FUEL 2-C	4016	.2500	.2500	.2500
37	FUEL 2-D	4017	.2500	.2500	.2500
38	FUEL 2-E	4018	.2500	.2500	.2500
39	FUEL 3-A	4024	.2500	.2500	.2500
40	FUEL 3-B	4025	.2500	.2500	.2500
41	FUEL 3-C	4026	.2500	.2500	.2500
42	FUEL 3-D	4027	.2500	.2500	.2500
43	FUEL 3-E	4028	.2500	.2500	.2500
44	FUEL 4-A	4034	.2500	.2500	.2500
45	FUEL 4-B	4035	.2500	.2500	.2500
46	FUEL 4-C	4036	.2500	.2500	.2500
47	FUEL 4-D	4037	.2500	.2500	.2500
48	FUEL 4-E	4038	.2500	.2500	.2500
49	LFT FLIN	4215	.2500	.2500	.2500
50	RHT FLIN	4216	.2500	.2500	.2500
51	LFT FUEL	4221	.2500	.2500	.2500

52	WHT FULL	4222	1.0000	.0000	.2500	.2500	.5000	1.0000	1.0000	1.0000
53	VENT TAP	4602	1.5000	.0000	.0000	.2500	.2500	.2500	.2500	.2500
54	OXYGEN	9402	1.5000	.0000	.0000	.2500	1.2500	1.2500	1.2500	1.5000
55	HT EXCHG	9917	1.0000	.0000	.0000	.0000	.0000	.0297	.0924	.7354
56	BLD LINF	9931	1.0000	.0000	.0000	.0000	.0000	.0000	.0000	.2500
57	PRI CHRG	9932	.2500	.0000	.0000	.0000	.0000	.0000	.0000	.0000
58	LFT CHRG	9933	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
59	WHT CHRG	9934	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
60	CARTR 1	9935	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
61	CARTR 2	9936	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
62	SUN CART	9937	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
63	HEM RKT	9938	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
64	SEAT RKT	9939	.2500	.0000	.0000	.0000	.0000	.0000	.0000	.0000
65	LFT CRKT	9940	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
66	RKT CRKT	9941	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

VIEW NUMBER 10  
 AZ = 45.0 EL = 45.0  
 REVERSED  
 TIME 00:00  
 00:00  
 00:00

PRESENTED AREA AND TRUE GROSS AREA VENTILATOR AREAS SQUARE FEET PER 1000

INDEX COMPONENT NAME NUMBER PRESENTED AREA TRUE GROSS AREA VENTILATOR AREAS SQUARE FEET PER 1000

INDEX	COMPONENT NAME	NUMBER	PRESENTED AREA	TRUE GROSS AREA	VENTILATOR AREAS	SQUARE FEET PER 1000
1	HEAD	2001	2500	2500	0	0
2	THORAX	2002	2500	2500	0	0
3	ABDOMEN	2003	12500	12500	0	0
4	PELVIS	2004	10000	10000	0	0
5	LEFT ARM	2005	2500	2500	0	0
6	RIGHT ARM	2006	2500	2500	0	0
7	LEFT LEG	2007	12500	12500	0	0
8	RIGHT LEG	2008	12500	12500	0	0
9	STR GRIP	3001	2500	2500	0	0
10	STR SENS	3002	2500	2500	0	0
11	STR YOKE	3003	2500	2500	0	0
12	LFT STAB	3137	2500	2500	0	0
13	RHT STAB	3237	2500	2500	0	0
14	M1 FLUID	3503	7500	7500	0	0
15	M1 MANTF	3504	5000	5000	0	0
16	M1 FLTR	3505	5000	5000	0	0
17	M1 COOLR	3506	5000	5000	0	0
18	M1 PUMP	3511	5000	5000	0	0
19	M1 PRESF	3514	5000	5000	0	0
20	M1 PRESR	3515	5000	5000	0	0
21	M2 FLUID	3603	12500	12500	0	0
22	M2 MANTF	3604	5000	5000	0	0
23	M2 FLTR	3605	5000	5000	0	0
24	M2 COOLR	3606	5000	5000	0	0
25	M2 PUMP	3611	5000	5000	0	0
26	M2 PRESF	3614	5000	5000	0	0
27	M2 PRESR	3615	5000	5000	0	0
28	M3 FLUID	3877	12500	12500	0	0
29	FUEL 1-A	4004	9000	9000	0	0
30	FUEL 1-B	4005	18000	18000	0	0
31	FUEL 1-C	4006	18000	18000	0	0
32	FUEL 1-D	4007	18000	18000	0	0
33	FUEL 1-E	4008	18000	18000	0	0
34	FUEL 2-A	4014	9000	9000	0	0
35	FUEL 2-B	4015	18000	18000	0	0
36	FUEL 2-C	4016	18000	18000	0	0
37	FUEL 2-D	4017	18000	18000	0	0
38	FUEL 2-E	4018	18000	18000	0	0
39	FUEL 3-A	4024	9000	9000	0	0
40	FUEL 3-B	4025	18000	18000	0	0
41	FUEL 3-C	4026	18000	18000	0	0
42	FUEL 3-D	4027	18000	18000	0	0
43	FUEL 3-E	4028	18000	18000	0	0
44	FUEL 4-A	4034	18000	18000	0	0
45	FUEL 4-B	4035	18000	18000	0	0
46	FUEL 4-C	4036	18000	18000	0	0
47	FUEL 4-D	4037	18000	18000	0	0
48	FUEL 4-E	4038	18000	18000	0	0
49	LFT FLIN	4215	12500	12500	0	0
50	RHT FLIN	4216	12500	12500	0	0
51	LFT FUEL	4221	12500	12500	0	0

52	RMT FUEL	4222	.7500	.5000	.5000	.7500	.7500	.7500	.7500
53	VENT TNA	4602	3.50000	.0000	.0000	.2500	.2500	.2500	.7500
54	OXYGEN	9402	1.25000	.0000	.0000	.5000	1.2500	1.2500	1.2500
55	MT EAC-IC	9917	1.00000	.0000	.0000	.0000	.0000	.2099	.3910
56	BLD LINE	9931	1.25000	.0000	.0000	.0000	.0000	.0000	.0000
57	PRI CMRG	9932	.25000	.0000	.0000	.0000	.0000	.0000	.2500
58	LFT CMRG	9933	.00000	.0000	.0000	.0000	.0000	.0000	.0000
59	RMT CMRG	9934	.00000	.0000	.0000	.0000	.0000	.0000	.0000
60	CART 1	9935	.25000	.0000	.0000	.0000	.0000	.0000	.0000
61	CART 2	9936	.00000	.0000	.0000	.0000	.0000	.0000	.0000
62	GUN CART	9937	.00000	.0000	.0000	.0000	.0000	.0000	.0000
63	HEM RMT	9938	.25000	.0000	.0000	.0000	.0000	.0000	.2500
64	SEAT RMT	9939	.50000	.0000	.0000	.0000	.0000	.0000	.0000
65	LFT CRKT	9940	.00000	.0000	.0000	.0000	.0000	.0000	.0000
66	RMT CRKT	9941	.00000	.0000	.0000	.0000	.0000	.0000	.0000

VIEW NUMBER 11  
AZ = 90.0 EL = 45.0

RENDERED  
ON

NUMBER OF COMPONENTS  
TOTAL 136

PL T TOUT  
TIME (SEC) 10.00  
10.00

PRESENTED AREA AND TIME COMPONENTS OF VOLUME AREA (SQUARE FEET) PER TIME INCREMENT

INDEX	COMPONENT	NAME	NUMBER	PRESENTED AREA	TIME INCREMENTS
1	HEAD	2001	1	0.00	0.00
2	THORAX	2002	1	0.00	0.00
3	ABDOMEN	2003	1	0.00	0.00
4	PELVIS	2004	1	0.00	0.00
5	LEFT ARM	2005	1	0.00	0.00
6	RIGHT ARM	2006	1	0.00	0.00
7	LEFT LEG	2007	1	0.00	0.00
8	RIGHT LEG	2008	1	0.00	0.00
9	STK GRIP	3001	1	0.00	0.00
10	STK SENS	3002	1	0.00	0.00
11	STK YOKE	3003	1	0.00	0.00
12	LFT STAR	3137	1	0.00	0.00
13	RHT STAR	3237	1	0.00	0.00
14	M1 FLUID	3503	1	0.00	0.00
15	M1 MANIF	3504	1	0.00	0.00
16	M1 FILTR	3505	1	0.00	0.00
17	M1 COCLR	3506	1	0.00	0.00
18	M1 PUMP	3511	1	0.00	0.00
19	M1 PRESF	3514	1	0.00	0.00
20	M1 PRESR	3515	1	0.00	0.00
21	M2 FLUID	3603	1	0.00	0.00
22	M2 MANIF	3604	1	0.00	0.00
23	M2 FILTR	3605	1	0.00	0.00
24	M2 COCLR	3606	1	0.00	0.00
25	M2 PUMP	3611	1	0.00	0.00
26	M2 PRESF	3614	1	0.00	0.00
27	M2 PRESR	3615	1	0.00	0.00
28	M1 FLUID	3677	1	0.00	0.00
29	FUEL 1-A	4004	1	0.00	0.00
30	FUEL 1-B	4005	1	0.00	0.00
31	FUEL 1-C	4006	1	0.00	0.00
32	FUEL 1-D	4007	1	0.00	0.00
33	FUEL 1-E	4008	1	0.00	0.00
34	FUEL 2-A	4014	1	0.00	0.00
35	FUEL 2-B	4015	1	0.00	0.00
36	FUEL 2-C	4016	1	0.00	0.00
37	FUEL 2-D	4017	1	0.00	0.00
38	FUEL 2-E	4018	1	0.00	0.00
39	FUEL 3-A	4024	1	0.00	0.00
40	FUEL 3-B	4025	1	0.00	0.00
41	FUEL 3-C	4026	1	0.00	0.00
42	FUEL 3-D	4027	1	0.00	0.00
43	FUEL 3-E	4028	1	0.00	0.00
44	FUEL 4-A	4034	1	0.00	0.00
45	FUEL 4-B	4035	1	0.00	0.00
46	FUEL 4-C	4036	1	0.00	0.00
47	FUEL 4-D	4037	1	0.00	0.00
48	FUEL 4-E	4038	1	0.00	0.00
49	LFT FLTA	4215	1	0.00	0.00
50	RHT FLTA	4216	1	0.00	0.00
51	LFT FUEL	4261	1	0.00	0.00

52	WHT FUEL	4222	.00000	.0000	.0000	.0000	.0000	.0000	.0000
53	VENT TMR	4602	3.25000	.5000	1.7500	1.7500	1.7500	2.0000	.0000
54	DRYGEN	9402	1.25000	.0000	1.0000	1.0000	1.2500	1.2500	.0000
55	MT EXCHG	917	1.00000	.0000	.0000	.3462	.5000	.5000	.0000
56	BLD LINE	9931	.00000	.0000	.0000	.0000	.0000	.0000	.0000
57	PHI CHRG	9932	.00000	.0000	.0000	.0000	.0000	.0000	.0000
58	LFT CHRG	9933	.00000	.0000	.0000	.0000	.0000	.0000	.0000
59	WHT CHRG	9934	.25000	.0000	.0000	.0000	.0000	.0000	.0000
60	CAPTR 1	9935	.00000	.0000	.0000	.0000	.0000	.0000	.0000
61	CAPTR 2	9936	.00000	.0000	.0000	.0000	.0000	.0000	.0000
62	GUN CRT	9937	.00000	.0000	.0000	.0000	.0000	.0000	.0000
63	REM RKT	9938	.25000	.0000	.0000	.0000	.0000	.0000	.0000
64	SEAT RKT	9939	.50000	.0000	.0000	.0000	.0000	.0000	.0000
65	LFT CRKT	9940	.00000	.0000	.0000	.0000	.0000	.0000	.0000
66	RHT CRKT	9941	.00000	.0000	.0000	.0000	.0000	.0000	.0000





52	RMT FUEL	4222	.75000	.5000	.5000	.7500	.7500	.7500	.7500
53	VENT TNR	4602	3.00000	.5000	.5000	.5000	.7500	.7500	.7500
54	OXYGEN	9402	1.00000	.0000	.0000	1.0000	1.0000	1.0000	1.0000
55	MT EXCHG	9917	.75000	.0000	.0000	.0000	.2099	.2099	.4043
56	BLD LINE	9931	.75000	.0000	.0000	.0000	.2500	.2500	.2500
57	PRI CMRG	9932	.00000	.0000	.0000	.0000	.0000	.0000	.0000
58	LFT CMRG	9933	.00000	.0000	.0000	.0000	.0000	.0000	.0000
59	RMT CMRG	9934	.00000	.0000	.0000	.0000	.0000	.0000	.0000
60	CART 1	9935	.00000	.0000	.0000	.0000	.0000	.0000	.0000
61	CART 2	9936	.00000	.0000	.0000	.0000	.0000	.0000	.0000
62	GUN CRT	9937	.25000	.0000	.0000	.0000	.0000	.0000	.0000
63	REM RMT	9938	.00000	.0000	.0000	.0000	.0000	.0000	.0000
64	SEAT RMT	9939	.75000	.0000	.0000	.0000	.2500	.2500	.2500
65	LFT CRT	9940	.00000	.0000	.0000	.0000	.0000	.0000	.0000
66	RMT CRT	9941	.00000	.0000	.0000	.0000	.0000	.0000	.0000

VIEW NUMBER 13  
 AZ = 90.0 EL = -90.0  
 REVERSED  
 NO  
 NUMBER OF COMPONENTS  
 TOTAL CRITICAL  
 1366 66  
 FLUX TABLE  
 TIME (SEC.) FLUX (W/SG.CM.)  
 10.00 10000.0

PRESENTED AREAS ARE TRUE COMPONENT VULNERABLE AREAS (SQUARE FEET) PER TIME INCREMENT

INDEX	COMPONENT NAME	NUMBER	PRESENTED AREA	1.50	1.00	1.50	2.00	4.00	6.00	10.00	20.00
1	HEAD	2001	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
2	THORAX	2002	1.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
3	ABDOMEN	2003	1.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
4	PELVIS	2004	.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
5	LEFT ARM	2005	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
6	RITE ARM	2006	.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
7	LEFT LEG	2007	1.25000	.2500	.2500	.2500	.2500	1.0000	1.0000	1.0000	1.2500
8	RITE LEG	2008	1.25000	.2500	.2500	.2500	.2500	1.0000	1.0000	1.0000	1.2500
9	STK GRIP	3001	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10	STK SENS	3002	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11	STK YOKE	3003	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
12	LFT STAR	3137	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
13	RMT STAB	3237	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
14	M1 FLUID	3503	1.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
15	M1 MANIF	3504	.25000	.2500	.2500	.2500	.2500	.2500	.2500	.2500	.2500
16	M1 FILTR	3505	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
17	M1 COCLR	3506	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
18	M1 PUMP	3511	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
19	M1 PRESF	3514	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
20	M1 PRESR	3515	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
21	M2 FLUID	3603	1.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
22	M2 MANIF	3604	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
23	M2 FILTR	3605	.25000	.2500	.2500	.2500	.2500	.2500	.2500	.2500	.2500
24	M2 COCLR	3606	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
25	M2 PUMP	3611	.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
26	M2 PRESF	3614	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
27	M2 PRESR	3615	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
28	MV FLUID	3877	1.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
29	FUEL 1-A	4004	7.00000	4.0000	6.0000	6.0000	6.0000	1.0000	1.0000	1.0000	1.0000
30	FUEL 1-B	4005	21.00000	1.2500	1.5000	1.5000	2.0000	5.2500	5.2500	6.0000	6.0000
31	FUEL 1-C	4006	21.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
32	FUEL 1-D	4007	21.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
33	FUEL 1-E	4008	21.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
34	FUEL 2-A	4014	10.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
35	FUEL 2-B	4015	10.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
36	FUEL 2-C	4016	10.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
37	FUEL 2-D	4017	10.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
38	FUEL 2-E	4018	10.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
39	FUEL 3-A	4024	10.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
40	FUEL 3-B	4025	10.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
41	FUEL 3-C	4026	10.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
42	FUEL 3-D	4027	10.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
43	FUEL 3-E	4028	9.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
44	FUEL 4-A	4034	16.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
45	FUEL 4-B	4035	28.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
46	FUEL 4-C	4036	42.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
47	FUEL 4-D	4037	39.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
48	FUEL 4-E	4038	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
49	LFT FLIA	4215	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
50	RMT FLIA	4216	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
51	LFT FUEL	4221	1.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

52	RMT FUEL	4222	1.2500	.7500	1.0000	1.0000	1.0000	1.0000	1.2500
53	VENT TNR	4602	.7500	.7500	.7500	.7500	.7500	.7500	.7500
54	OXYGEN	9402	.7500	.0000	.0000	.0000	.0000	.0000	.0000
55	WT EXCHG	9917	1.0000	.0000	.0000	.0000	.0000	.0000	.0000
56	BLD LINE	9931	.0000	.0000	.0000	.0000	.0000	.0000	.0000
57	PRI CHRG	9932	.0000	.0000	.0000	.0000	.0000	.0000	.0000
58	LFT CHRG	9933	.0000	.0000	.0000	.0000	.0000	.0000	.0000
59	RMT CHRG	9934	.0000	.0000	.0000	.0000	.0000	.0000	.0000
60	CART 1	9935	.0000	.0000	.0000	.0000	.0000	.0000	.0000
61	CART 2	9936	.0000	.0000	.0000	.0000	.0000	.0000	.0000
62	GUN CRT	9937	.0000	.0000	.0000	.0000	.0000	.0000	.0000
63	REM RMT	9938	.0000	.0000	.0000	.0000	.0000	.0000	.0000
64	SEAT RMT	9939	.2500	.0000	.0000	.0000	.0000	.0000	.0000
65	LFT CRKT	9940	.0000	.0000	.0000	.0000	.0000	.0000	.0000
66	RMT CRKT	9941	.0000	.0000	.0000	.0000	.0000	.0000	.0000

VIEW NUMBER 10 EL = .0 REVERSED YES  
 AZ = 100.0 EL = .0  
 NUMBER OF COMPONENTS  
 TOTAL CRITICAL  
 1368 66  
 TIME (SEC.) FLUX (W/SQ.CM.)  
 10.00 10000.0

PRESENTED AREAS AND TRUE COMPONENT VULNERABLE AREAS (SQUARE FEET) PER TIME INCREMENT

INDEX	COMPONENT NAME	NUMBER	PRESENTED AREA	1.50	1.00	1.50	2.00	4.00	6.00	8.00	10.00	20.00
1	HEAD	2001	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
2	THORAX	2002	1.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
3	ABDOMEN	2003	.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
4	PELVIS	2004	1.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
5	LEFT ARM	2005	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
6	RITE ARM	2006	.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
7	LEFT LEG	2007	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
8	RITE LEG	2008	.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
9	STK GRIP	3001	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10	STK SENS	3002	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11	STK YOKE	3003	1.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
12	LFT STAB	3137	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
13	RHT STAB	3237	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
14	M1 FLUID	3503	1.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
15	M1 MANIF	3504	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
16	M1 FILTER	3505	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
17	M1 COOLR	3506	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
18	M1 PUMP	3511	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
19	M1 PRESF	3514	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
20	M1 PRESR	3515	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
21	M2 FLUID	3603	1.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
22	M2 MANIF	3604	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
23	M2 FILTER	3605	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
24	M2 COOLR	3606	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
25	M2 PUMP	3611	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
26	M2 PRESF	3612	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
27	M2 PRESR	3615	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
28	M1 FLUID	3877	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
29	FUEL 1-A	4004	5.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
30	FUEL 1-B	4005	1.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
31	FUEL 1-C	4006	1.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
32	FUEL 1-D	4007	1.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
33	FUEL 1-E	4008	3.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
34	FUEL 2-A	4014	1.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
35	FUEL 2-B	4015	3.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
36	FUEL 2-C	4016	1.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
37	FUEL 2-D	4017	3.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
38	FUEL 2-E	4018	3.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
39	FUEL 3-A	4024	3.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
40	FUEL 3-B	4025	1.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
41	FUEL 3-C	4026	3.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
42	FUEL 3-D	4027	1.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
43	FUEL 3-E	4028	3.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
44	FUEL 4-A	4034	4.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
45	FUEL 4-B	4035	2.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
46	FUEL 4-C	4036	2.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
47	FUEL 4-D	4037	2.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
48	FUEL 4-E	4038	2.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
49	LFT FLIA	4215	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
50	RHT FLIA	4216	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
51	LFT FUEL	4221	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000



VITA NUMBER IS 00  
 AZ = 225.0 EL = 00  
 REVERSE  
 YES  
 NUMBER OF COMPONENTS  
 TOTAL CRITICAL  
 1368 66  
 TIME (SEC.) FLUX (W/SQ.CM.)  
 10.00 10000.0

## PRESENTED AREAS AND TRUE COMPONENT VULNERABLE AREAS (SQUARE FEET) PER TIME INCREMENT

INDEX	COMPONENT NAME	NUMBER	PRESENTED AREA	TIME INCREMENTS									
				.50	1.00	1.50	2.00	4.00	6.00	8.00	16.00	20.00	
1	HEAD	2001	.50000	.2500	.5000	.7500	.5000	.5000	.5000	.5000	.5000	.5000	
2	THORAX	2002	1.00000	.2500	.5000	.7500	.7500	1.0000	1.0000	1.0000	1.0000	1.0000	
3	ABDOMEN	2003	1.50000	.0000	.2500	.5000	.5000	.5000	.7500	.7500	.7500	.7500	
4	PELVIS	2004	1.25000	.0000	.2500	.2500	.2500	.5000	.5000	.5000	.5000	1.0000	
5	LEFT ARM	2005	1.00000	.5000	.0000	.7500	.0000	.0000	.0000	.0000	.0000	.2500	
6	RITE ARM	2006	.75000	.5000	.7500	.7500	.7500	.7500	.7500	.7500	.7500	.7500	
7	LEFT LEG	2007	1.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.2500	
8	RITE LEG	2008	1.25000	.5000	.7500	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
9	STK GRIP	3001	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
10	STK SEHS	3002	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
11	STK YONE	3003	.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
12	LFT STAR	3137	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
13	RMT STAR	3237	.50000	.0000	.0000	.0000	.0000	.0000	.5000	.5000	.5000	.5000	
14	M1 FLUID	3503	.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
15	M1 MANIF	3504	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
16	M1 FILTR	3505	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
17	M1 COULR	3506	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
18	M1 PUMP	3511	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
19	M1 PRESF	3514	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
20	M1 PRESR	3515	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
21	M2 FLUID	3603	1.00000	.0000	.0000	.0000	.0000	.2500	.5000	.7500	.7500	.7500	
22	M2 MANIF	3604	.50000	.0000	.0000	.0000	.0000	.0000	.5000	.5000	.5000	.5000	
23	M2 FILTR	3605	.50000	.0000	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000	
24	M2 COULR	3606	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
25	M2 PUMP	3611	.25000	.0000	.2500	.2500	.2500	.2500	.2500	.2500	.2500	.2500	
26	M2 PRESF	3614	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
27	M2 PRESR	3615	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
28	M1 FLUID	3877	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
29	FUEL 1-A	4004	6.00000	.0000	.0000	.0000	.0000	.2500	.2500	.2500	.2500	.2500	
30	FUEL 1-B	4005	3.25000	.0000	.7500	1.7500	1.7500	1.7500	1.7500	2.0000	2.0000	2.0000	
31	FUEL 1-C	4006	3.25000	.0000	.0000	.7500	.7500	1.5000	1.7500	2.0000	2.0000	2.0000	
32	FUEL 1-D	4007	3.25000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	
33	FUEL 1-E	4008	6.25000	3.5000	3.7500	3.7500	3.7500	3.7500	3.7500	4.0000	4.0000	4.0000	
34	FUEL 2-A	4014	2.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
35	FUEL 2-B	4015	4.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
36	FUEL 2-C	4016	2.25000	.0000	.0000	.0000	.0000	.2500	.5000	.5000	.7500	1.0000	
37	FUEL 2-D	4017	4.50000	.5000	1.2500	1.2500	1.2500	1.2500	1.5000	2.2500	2.2500	2.2500	
38	FUEL 2-E	4018	4.25000	.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	2.5000	3.0000	
39	FUEL 3-A	4024	3.75000	.0000	.0000	.0000	.0000	.2500	.2500	.2500	.2500	.5000	
40	FUEL 3-B	4025	2.25000	.0000	.0000	.0000	.0000	.0000	.0000	.2500	.2500	.5000	
41	FUEL 3-C	4026	4.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
42	FUEL 3-D	4027	2.50000	.0000	.0000	.0000	.0000	.2500	.2500	.2500	.2500	.2500	
43	FUEL 3-E	4028	3.75000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	
44	FUEL 4-A	4034	10.00000	.0000	.0000	4.2500	5.7500	7.0000	7.7500	7.7500	7.7500	7.7500	
45	FUEL 4-B	4035	4.25000	.0000	.0000	.2500	.2500	.7500	.7500	.7500	.7500	1.0000	
46	FUEL 4-C	4036	4.75000	.0000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	2.0000	2.2500	
47	FUEL 4-D	4037	4.75000	.0000	1.0000	1.5000	2.5000	2.7500	3.0000	3.2500	3.2500	3.2500	
48	FUEL 4-E	4038	5.50000	2.0000	2.0000	2.5000	2.5000	3.2500	3.2500	3.2500	4.0000	5.0000	
49	LFT FLTA	4215	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
50	RMT FLTA	4216	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
51	LFT FUEL	4221	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	

2

VIEW NUMBER 16  
AZ = 270.0 EL = 0.0  
REVERSE  
YES  
NUMBER OF COMPONENTS  
TOTAL CRITICAL  
1366 66  
FLUX TABLE  
TIME (SEC.) FLUX (W/SEC.CM.)  
10.00 10000.0

## PRESENTED AREAS AND TRUE COMPONENT VULNERABLE AREAS (SQUARE FEET) PER TIME INCREMENT

INDEX	COMPONENT NAME	NUMBER	PRESENTED AREA	1.00	1.50	2.00	4.00	6.00	8.00	10.00	20.00
1	HEAD	2001	.5000	.7500	.7500	.7500	.7500	.7500	.7500	.7500	.7500
2	TWOMAX	2002	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
3	ABDOMEN	2003	.2500	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000
4	PELVIS	2004	.0000	.2500	.2500	.2500	.2500	.2500	.2500	.2500	.2500
5	LEFT ARM	2005	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000
6	RITE ARM	2006	.5000	.7500	.7500	.7500	.7500	.7500	.7500	.7500	.7500
7	LEFT LEG	2007	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
8	RITE LEG	2008	.5000	1.0000	1.2500	1.2500	1.5000	1.5000	1.5000	1.5000	1.5000
9	STK GRIP	3001	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10	STK SENS	3002	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11	STK YOKE	3003	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
12	LFT STAB	3137	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
13	RMT STAB	3237	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000
14	M1 FLUID	3503	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
15	M1 MANIF	3504	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000
16	M1 FILTR	3505	.2500	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
17	M1 COOLR	3506	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
18	M1 PUMP	3511	.2500	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
19	M1 PRESF	3514	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
20	M1 PRFSR	3515	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000
21	M2 FLUID	3603	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
22	M2 MANIF	3604	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
23	M2 FILTR	3605	.2500	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
24	M2 COOLR	3606	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
25	M2 PUMP	3611	1.2500	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
26	M2 PRESF	3614	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
27	M2 PRESF	3615	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
28	M1 FLUID	3677	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
29	FUEL 1-A	4004	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000
30	FUEL 1-B	4005	.5000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000
31	FUEL 1-C	4006	.0000	1.2500	2.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000
32	FUEL 1-D	4007	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000
33	FUEL 1-E	4008	5.5000	5.5000	5.5000	5.5000	5.5000	5.5000	5.5000	5.5000	5.5000
34	FUEL 2-A	4014	.0000	1.0000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000
35	FUEL 2-B	4015	.0000	.5000	1.5000	1.5000	2.0000	2.0000	2.2500	3.0000	3.0000
36	FUEL 2-C	4016	1.5000	.5000	.5000	.5000	1.2500	1.2500	1.2500	1.2500	1.2500
37	FUEL 2-D	4017	3.0000	1.7500	1.7500	1.7500	3.0000	3.0000	3.0000	3.0000	3.0000
38	FUEL 2-E	4018	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000
39	FUEL 3-A	4024	.0000	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000
40	FUEL 3-B	4025	1.5000	.0000	.5000	.5000	1.0000	1.0000	1.0000	1.0000	1.2500
41	FUEL 3-C	4026	3.0000	.0000	.2500	.2500	.7500	.7500	1.0000	1.0000	1.2500
42	FUEL 3-D	4027	.0000	.0000	.0000	.0000	.0000	.5000	.5000	.5000	.5000
43	FUEL 3-E	4028	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000
44	FUEL 4-A	4034	10.7500	.5000	.5000	.5000	.7500	.7500	1.0000	1.0000	1.2500
45	FUEL 4-B	4035	4.2500	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
46	FUEL 4-C	4036	.0000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.7500	2.0000
47	FUEL 4-D	4037	4.2500	3.0000	3.5000	3.5000	3.5000	3.5000	3.5000	3.5000	3.5000
48	FUEL 4-E	4038	5.5000	4.2500	4.2500	4.2500	5.2500	5.5000	5.5000	5.5000	5.5000
49	LFT FLIA	4215	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
50	RMT FLIA	4216	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
51	LFT FUEL	4221	.2500	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000



LINE	ITEM	QTY	UNIT	PRICE	AMOUNT	TAX	TOTAL
52	WMT FUEL	4222		.000000	.0000	.0000	.0000
53	VENT TANK	4402		3.750000	.0000	.0000	.0000
54	UXYGEA	9402		1.250000	.0000	.0000	.0000
55	WT EXCHG	9917		1.500000	.0000	.0000	.0000
56	BLD LINE	9431		.000000	.0000	.0000	.0000
57	PRI CHRG	9432		.000000	.0000	.0000	.0000
58	LFT CHRG	9433		.000000	.0000	.0000	.0000
59	WMT CHRG	9434		.000000	.0000	.0000	.0000
60	CARTR 1	9435		.000000	.0000	.0000	.0000
61	CARTR 2	9436		.000000	.0000	.0000	.0000
62	GUN CART	9937		.000000	.0000	.0000	.0000
63	REM RMT	9938		.250000	.0000	.0000	.0000
64	SEAT MKT	9939		.000000	.0000	.0000	.0000
65	LFT CRKT	9940		.250000	.0000	.0000	.0000
66	WMT CRKT	9941		.250000	.0000	.0000	.0000

VIEW NUMBER 17  
 AZ = 315.0 EL = .0  
 REVERSED  
 YES  
 NUMBER OF COMPONENTS  
 TOTAL 1368  
 CRITICAL 64  
 TIME (SEC.) 10.00  
 PLUM/W/SQ.CM. 10000.0

## PRESENTED AREAS AND TRUE COMPONENT VULNERABLE AREAS (SQUARE FEET) PER TIME INCREMENT

INDEX	COMPONENT NAME	NUMBER	PRESENTED AREA	1.50	1.00	1.50	2.00	4.00	6.00	8.00	10.00	15.00	20.00
1	HEAD	2001	.50000	.2500	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000
2	THORAX	2002	1.00000	.2500	.2500	.2500	.2500	.2500	.2500	.2500	.2500	.2500	.2500
3	ABDOMEN	2003	1.50000	.2500	.7500	.7500	.7500	.7500	.7500	.7500	.7500	.7500	1.0000
4	PELVIS	2004	1.25000	.2500	.2500	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.7500
5	LEFT ARM	2005	1.25000	.2500	.2500	.2500	.2500	.2500	.2500	.2500	.2500	.2500	.7500
6	RIGHT ARM	2006	.75000	.5000	.7500	.7500	.7500	.7500	.7500	.7500	.7500	.7500	.7500
7	LEFT LEG	2007	1.25000	.0000	.0000	.2500	.2500	.5000	.5000	.5000	.5000	.5000	.7500
8	RIGHT LEG	2008	1.00000	.5000	.5000	.7500	.7500	.7500	.7500	.7500	1.0000	1.0000	.2500
9	STK GRIP	3001	.25000	.0000	.0000	.0000	.0000	.2500	.2500	.2500	.2500	.2500	.2500
10	STK SENS	3002	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11	STK YOKE	3003	1.00000	.0000	.0000	.0000	.0000	.2500	.2500	.2500	.2500	.2500	.2500
12	RHT STAB	3137	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
13	LFT STAB	3237	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
14	M1 FLUID	3503	.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
15	M1 MANIF	3504	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
16	M1 FILTER	3505	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
17	M1 COOLR	3506	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
18	M1 PUMP	3511	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
19	M1 PRESF	3514	.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
20	M1 PRESS	3515	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
21	M2 FLUID	3603	1.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
22	M2 MANIF	3604	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
23	M2 FILTER	3605	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
24	M2 COOLR	3606	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
25	M2 PUMP	3611	.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
26	M2 PRESF	3614	.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
27	M2 PRESS	3615	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
28	M1 FLUID	3877	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
29	FUEL 1-A	4004	6.00000	2.2500	2.2500	3.0000	3.0000	3.0000	3.2500	3.2500	3.2500	3.2500	4.5000
30	FUEL 1-B	4005	3.25000	1.2500	2.5000	2.7500	2.7500	2.7500	2.7500	3.2500	3.2500	3.2500	3.2500
31	FUEL 1-C	4006	3.25000	.0000	.0000	1.5000	2.2500	3.0000	3.2500	3.2500	3.2500	3.2500	3.2500
32	FUEL 1-D	4007	3.25000	3.0000	3.2500	3.2500	3.2500	3.2500	3.2500	3.2500	3.2500	3.2500	3.2500
33	FUEL 1-E	4008	6.25000	5.0000	5.0000	5.0000	5.0000	5.2500	5.2500	5.2500	5.2500	5.2500	6.2500
34	FUEL 2-A	4014	2.25000	.0000	.0000	.7500	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
35	FUEL 2-B	4015	4.50000	.0000	.0000	1.5000	1.5000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000
36	FUEL 2-C	4016	2.25000	.0000	.5000	.5000	.5000	.7500	.7500	.7500	.7500	1.0000	1.0000
37	FUEL 2-D	4017	4.50000	.0000	1.0000	1.0000	1.0000	1.5000	1.5000	2.0000	2.0000	2.0000	2.0000
38	FUEL 2-E	4018	4.25000	.0000	1.5000	1.7500	1.7500	1.7500	1.7500	1.7500	1.7500	1.7500	1.7500
39	FUEL 3-A	4024	3.75000	.0000	.2500	.2500	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.5000
40	FUEL 3-B	4025	2.25000	.0000	.0000	.0000	.0000	.2500	.5000	.5000	.5000	.5000	.7500
41	FUEL 3-C	4026	4.25000	.0000	.0000	.0000	.2500	1.0000	1.5000	1.5000	1.7500	1.7500	2.0000
42	FUEL 3-D	4027	2.50000	.0000	.0000	.0000	.0000	.0000	.0000	.7500	.7500	1.2500	1.2500
43	FUEL 3-E	4028	3.75000	.0000	1.7500	1.7500	1.7500	1.7500	1.7500	1.7500	1.7500	1.7500	1.7500
44	FUEL 4-A	4034	10.00000	.0000	.0000	1.2500	2.5000	4.5000	4.5000	4.5000	4.5000	4.5000	4.7500
45	FUEL 4-B	4035	4.25000	.0000	.0000	.0000	.0000	.0000	.0000	.2500	.2500	.2500	.2500
46	FUEL 4-C	4036	4.75000	.0000	1.0000	1.0000	1.0000	1.5000	1.5000	1.7500	1.7500	1.7500	1.7500
47	FUEL 4-D	4037	4.75000	.0000	1.0000	1.0000	1.0000	1.5000	1.5000	1.7500	1.7500	1.7500	1.7500
48	FUEL 4-E	4038	5.50000	1.7500	3.0000	3.7500	3.7500	3.7500	3.7500	3.7500	3.7500	3.7500	3.7500
49	LFT FLTR	4215	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
50	RHT FLTR	4216	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
51	LFT FLTR	4221	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

AD-A128 473

BENCHMARK FOR THE ASALT PROGRAM: ASSESSMENT OF  
SURVIVABILITY AGAINST LASER THREATS(U) ARMAMENT SYSTEMS  
INC ANAHEIM CA F J STEENROD ET AL. SEP 81

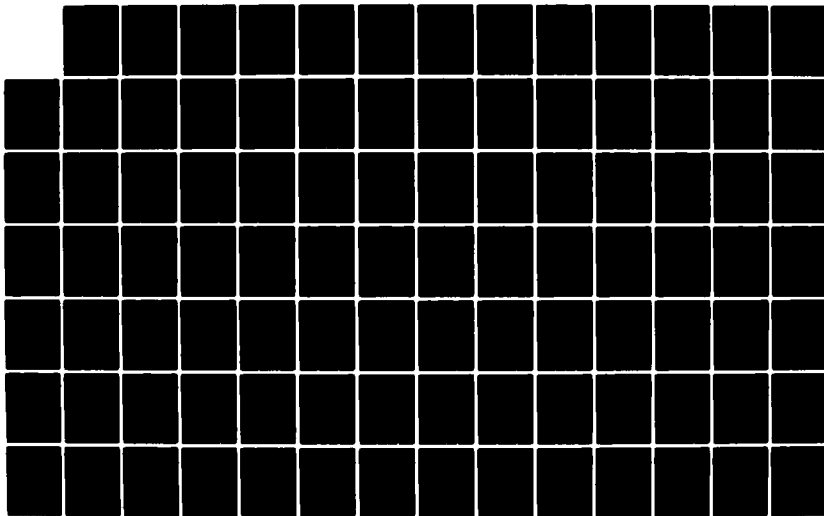
2/3

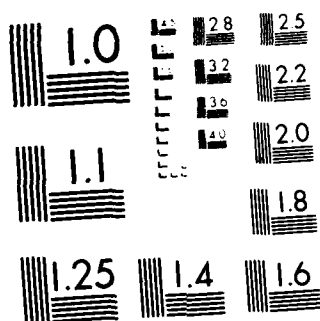
UNCLASSIFIED

JTCG/AS-81-S-005 N00123-80-D-0033

F/G 20/5

NL





MICROCOPY RESOLUTION TEST CHART  
NATIONAL BUREAU OF STANDARDS-1963-A

52	RMT FUEL	4222	.00000	.0000	.0000	.0000	.0000	.0000	.0000
53	VENT TAN	4802	3.75000	.0000	.0000	.0000	.0000	.0000	.0000
54	OXYGEN	9402	1.25000	.0000	.0000	.0000	.0000	.0000	.0000
55	HT EXCHG	9917	1.50000	.0000	.0000	.0000	.0000	.0000	.0000
56	BLD LINE	9931	.75000	.0000	.0000	.0000	.0000	.0000	.0000
57	PRI CMRG	9932	.00000	.0000	.0000	.0000	.0000	.0000	.0000
58	LFT CMRG	9933	.00000	.0000	.0000	.0000	.0000	.0000	.0000
59	RMT CMRG	9934	.00000	.0000	.0000	.0000	.0000	.0000	.0000
60	CART 1	9935	.00000	.0000	.0000	.0000	.0000	.0000	.0000
61	CART 2	9936	.00000	.0000	.0000	.0000	.0000	.0000	.0000
62	GUN CART	9937	.25000	.0000	.0000	.0000	.0000	.0000	.0000
63	REM RMT	9938	.00000	.0000	.0000	.0000	.0000	.0000	.0000
64	SEAT RMT	9939	.00000	.0000	.0000	.0000	.0000	.0000	.0000
65	LFT CRT	9940	.25000	.0000	.0000	.0000	.0000	.0000	.0000
66	RMT CRT	9941	.25000	.0000	.0000	.0000	.0000	.0000	.0000

VIEW NUMBER 1A  
 AZ = 100.0 EL = 45.0  
 REVERSE  
 YES  
 NUMBER OF COMPONENTS  
 TOTAL 136  
 CRITICAL 66  
 TIME (SEC.) 10.00  
 FLUX (W/SQ.CM.) 10000.0

## PRESENTED AREAS AND TRUE COMPONENT VULNERABLE AREAS (SQUARE FEET) PER TIME INCREMENT

INDEX	COMPONENT NAME	NUMBER	PRESENTED AREA	TIME INCREMENTS									
				.50	1.00	1.50	2.00	4.00	6.00	10.00	20.00		
1	HEAD	2001	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
2	THORAX	2002	1.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
3	ABDOMEN	2003	.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
4	PELVIS	2004	1.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
5	LEFT ARM	2005	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
6	RITE ARM	2006	.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
7	LEFT LEG	2007	1.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
8	RITE LEG	2008	1.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
9	STK GRIP	3001	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10	STK SENS	3002	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11	STK YOKE	3003	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
12	LFT STAR	3137	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
13	RHT STAR	3237	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
14	M1 FLUID	3503	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
15	M1 MANIF	3504	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
16	M1 FILTR	3505	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
17	M1 COCLR	3506	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
18	M1 PUMP	3511	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
19	M1 PRESF	3514	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
20	M1 PRESR	3515	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
21	M2 FLUID	3603	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
22	M2 MANIF	3604	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
23	M2 FILTR	3605	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
24	M2 COCLR	3606	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
25	M2 PUMP	3611	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
26	M2 PRESF	3614	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
27	M2 PRESR	3615	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
28	M1 FLUID	3677	1.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
29	FUEL 1-A	4004	10.00000	2.5000	3.0000	3.0000	.0000	1.0000	4.5000	4.5000	1.0000	1.0000	1.0000
30	FUEL 1-B	4005	17.50000	.0000	.2500	.2500	.2500	.2500	.7500	1.2500	4.5000	4.5000	5.0000
31	FUEL 1-C	4006	15.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
32	FUEL 1-D	4007	15.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
33	FUEL 1-E	4008	15.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
34	FUEL 2-A	4014	10.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
35	FUEL 2-B	4015	10.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
36	FUEL 2-C	4016	8.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
37	FUEL 2-D	4017	6.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
38	FUEL 2-E	4018	8.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
39	FUEL 3-A	4024	8.75000	.0000	.0000	1.2500	.0000	.0000	.0000	.0000	.0000	.0000	.0000
40	FUEL 3-B	4025	8.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
41	FUEL 3-C	4026	8.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
42	FUEL 3-D	4027	8.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
43	FUEL 3-E	4028	6.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
44	FUEL 4-A	4034	14.50000	.0000	.7500	1.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
45	FUEL 4-B	4035	22.25000	.0000	.0000	1.5000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
46	FUEL 4-C	4036	31.75000	.0000	.0000	.2500	.0000	.7500	1.2500	2.2500	2.2500	2.2500	3.0000
47	FUEL 4-D	4037	31.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
48	FUEL 4-E	4038	29.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
49	LFT FLIA	4215	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
50	RHT FLIA	4216	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
51	LFT FUEL	4221	.75000	.0000	.0000	.0000	.2500	.2500	.2500	.2500	.2500	.2500	.5000

52	HMT FUEL	4222	1.00000	.0000	.2500	.2500	.5000	.5000	.7500	.7500
53	VENT TNR	4602	1.25000	.2500	.2500	.2500	.7500	.7500	.7500	.7500
54	ORIGEN	9402	1.00000	.0000	.0000	.0000	1.0000	1.0000	1.0000	1.0000
55	MT EXCHG	9917	1.25000	.0000	.0000	.0000	.0564	.2628	.2500	.2500
56	BLD LINE	9931	1.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
57	PRI CHRG	9932	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
58	LFT CHRG	9933	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
59	HMT CHRG	9934	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
60	CART 1	9935	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
61	CART 2	9936	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
62	GUN CRT	9937	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
63	REM RKT	9938	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
64	SEAT RKT	9939	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
65	LFT CRPT	9940	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
66	RMT CRPT	9941	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

VIEW NUMBER 19 REVERSEL NUMBER OF COMPONENTS TIME (SEC) 10.00  
 AZ = 225.0 EL = 45.0 TOTAL INITIAL 66 10000.0

## PRESENTED AREAS AND TRUE COMPONENT VULNERABLE AREAS (SQUARE FEET) PER TIME INCREMENT

INDEX	COMPONENT NAME	NUMBER	PRESENTED AREA	1.00	1.50	2.00	Time INCREMENTS	4.50	6.00	8.00
1	HEAD	2001	.5000	.0000	.2500	.2500	.2500	.2500	.2500	.2500
2	THORAX	2002	.75000	.2500	.2500	.2500	.2500	.2500	.2500	.2500
3	ABDOMEN	2003	1.25000	.0000	.2500	.2500	.2500	.2500	.2500	.2500
4	PELVIS	2004	1.50000	.0000	.0000	.2500	.2500	.2500	.2500	.2500
5	LEFT ARM	2005	1.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
6	WITE ARM	2006	.75000	.0000	.2500	.2500	.2500	.2500	.2500	.2500
7	LEFT LEG	2007	1.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
8	WITE LEG	2008	1.50000	.0000	.0000	.2500	.2500	.2500	.2500	.2500
9	STA GRIP	3001	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10	STA SENS	3002	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11	STA YORE	3003	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
12	LFT STAR	3137	1.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
13	RMT STAR	3237	.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
14	M1 FLUID	3503	.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
15	M1 MANIF	3504	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
16	M1 FILTR	3505	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
17	M1 CULR	3506	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
18	M1 PUMP	3511	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
19	M1 PRESF	3514	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
20	M1 PRESR	3515	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
21	M2 FLUID	3603	.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
22	M2 MANIF	3604	.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
23	M2 FILTR	3605	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
24	M2 CULR	3606	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
25	M2 PUMP	3611	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
26	M2 PRESF	3614	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
27	M2 PRESR	3615	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
28	M1 FLUID	3877	1.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
29	FUEL 1-A	4004	9.25000	.2500	.2500	.2500	.2500	.2500	.2500	.2500
30	FUEL 1-B	4005	17.75000	.2500	.2500	.2500	.2500	.2500	.2500	.2500
31	FUEL 1-C	4006	17.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
32	FUEL 1-D	4007	17.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
33	FUEL 1-E	4008	16.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
34	FUEL 2-A	4014	9.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
35	FUEL 2-B	4015	9.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
36	FUEL 2-C	4016	9.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
37	FUEL 2-D	4017	10.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
38	FUEL 2-E	4018	9.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
39	FUEL 3-A	4024	6.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
40	FUEL 3-B	4025	6.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
41	FUEL 3-C	4026	9.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
42	FUEL 3-D	4027	9.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
43	FUEL 3-E	4028	7.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
44	FUEL 4-A	4034	16.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
45	FUEL 4-B	4035	24.75000	.2500	.2500	.2500	.2500	.2500	.2500	.2500
46	FUEL 4-C	4036	34.50000	.2500	.2500	.2500	.2500	.2500	.2500	.2500
47	FUEL 4-D	4037	34.25000	.2500	.2500	.2500	.2500	.2500	.2500	.2500
48	FUEL 4-E	4038	24.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
49	LFT FLIA	4215	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
50	RMT FLIA	4216	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
51	LFT FLIB	4221	.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000



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52	RMT FUEL	4222	2500	2500	2500	2500	2500	2500	2500
53	VENT TANK	4602	0000	2500	2500	2500	2500	2500	2500
54	OXYGEN	9402	0000	0000	0000	0000	0000	0000	0000
55	WT EXCHG	9917	0000	0000	0000	0000	0000	0000	0000
56	ALD LINE	9931	0000	0000	0000	0000	0000	0000	0000
57	PRI CMRG	9932	0000	0000	0000	0000	0000	0000	0000
58	LFT CMRG	9933	0000	0000	0000	0000	0000	0000	0000
59	RMT CMRG	9934	0000	0000	0000	0000	0000	0000	0000
60	CARTN 1	9935	0000	0000	0000	0000	0000	0000	0000
61	CARTN 2	9936	0000	0000	0000	0000	0000	0000	0000
62	GUN CART	9937	0000	0000	0000	0000	0000	0000	0000
63	REM WAT	9938	0000	0000	0000	0000	0000	0000	0000
64	SEAT WAT	9939	75000	0000	0000	0000	0000	0000	0000
65	LFT CRAT	9940	00000	0000	0000	0000	0000	0000	0000
66	RMT CRAT	9941	00000	0000	0000	0000	0000	0000	0000

VIEW NUMBER 2: REVERSED NUMBER OF COMPONENTS  
 AZ = 270.0 EL = 45.0 TOTAL CRITICAL  
 1368 66  
 TIME (SEL.) 10.00 1000.0  
 1000.0

## PRESENTED AREAS AND TRUE COMPONENT VULNERABLE AREAS (SQUARE FEET) PER TIME INCREMENT

INDEX	COMPONENT	AREA	PRESENTED	1.00	1.50	2.00	4.00	8.00	10.00	1000.0	20.00
1	HEAD	75000	.0000	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000
2	THORAX	100000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
3	ABDOMEN	100000	.0000	.2500	.2500	.2500	.2500	.2500	.2500	.2500	.2500
4	PELVIS	75000	.2500	.2500	.2500	.2500	.2500	.2500	.2500	.2500	.2500
5	LEFT ARM	50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
6	RITE ARM	75000	.0000	.2500	.2500	.2500	.2500	.2500	.2500	.2500	.2500
7	LEFT LEG	200000	.0000	.0000	.2500	.2500	.2500	.2500	.2500	.2500	.2500
8	RITE LEG	200000	1.2500	1.2500	1.2500	1.2500	1.2500	1.2500	1.2500	1.2500	1.2500
9	STR GRIP	3000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10	STR SENS	3002	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11	STR YOK	3003	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
12	LFT STAB	3137	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
13	RHT STAB	3237	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
14	M1 FLUID	3503	.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
15	M1 MANIF	3504	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
16	M1 FILTR	3505	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
17	M1 COCLR	3506	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
18	M1 PUMP	3511	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
19	M1 PRESF	3514	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
20	M1 PRESF	3515	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
21	M2 FLUID	3603	1.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
22	M2 MANIF	3604	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
23	M2 FILTR	3605	.25000	.2500	.2500	.2500	.2500	.2500	.2500	.2500	.2500
24	M2 COCLR	3606	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
25	M2 PUMP	3611	.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
26	M2 PRESF	3614	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
27	M2 PRESF	3615	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
28	M1 FLUID	3677	1.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
29	FUEL 1-A	4004	7.00000	6.0000	6.0000	6.0000	6.0000	6.0000	6.0000	6.0000	6.0000
30	FUEL 1-B	4005	18.00000	2.0000	3.5000	5.7500	5.7500	5.7500	5.7500	5.7500	5.7500
31	FUEL 1-C	4006	16.00000	.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000
32	FUEL 1-D	4007	15.25000	.0000	.2500	.2500	.2500	.2500	.2500	.2500	.2500
33	FUEL 1-E	4008	15.00000	.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000
34	FUEL 2-A	4014	9.00000	.0000	4.7500	5.7500	7.5000	7.5000	7.5000	7.5000	7.5000
35	FUEL 2-B	4015	9.00000	.0000	1.2500	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000
36	FUEL 2-C	4016	9.00000	.0000	.5000	.5000	1.5000	1.5000	1.5000	1.5000	1.5000
37	FUEL 2-D	4017	9.00000	.0000	.5000	.5000	1.5000	1.5000	1.5000	1.5000	1.5000
38	FUEL 2-E	4018	9.00000	.0000	1.0000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000
39	FUEL 3-A	4024	9.00000	.0000	3.0000	5.2500	5.2500	5.2500	5.2500	5.2500	5.2500
40	FUEL 3-B	4025	9.00000	.0000	.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
41	FUEL 3-C	4026	9.00000	.0000	.5000	.7500	.7500	.7500	.7500	.7500	.7500
42	FUEL 3-D	4027	7.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
43	FUEL 3-E	4028	7.75000	.0000	.2500	.2500	.2500	.2500	.2500	.2500	.2500
44	FUEL 4-A	4034	18.50000	.0000	1.7500	5.2500	6.5000	8.2500	8.2500	8.2500	8.2500
45	FUEL 4-B	4035	24.50000	1.7500	5.0000	8.2500	8.2500	8.2500	8.2500	8.2500	8.2500
46	FUEL 4-C	4036	31.00000	1.2500	2.7500	5.2500	5.2500	5.2500	5.2500	5.2500	5.2500
47	FUEL 4-D	4037	35.25000	.0000	.5000	.5000	.5000	.5000	.5000	.5000	.5000
48	FUEL 4-E	4038	28.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
49	LFT FLTA	4215	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
50	RHT FLTA	4214	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
51	LFT FUEL	4221	.25000	.0000	.2500	.2500	.2500	.2500	.2500	.2500	.2500

52	HMT FUEL	4222	.2500	.2500	.2500	.2500	.2500	.2500
53	VENT TNA	4402	.0000	.0000	.0000	.0000	.0000	.0000
54	CRYGEN	9402	.0000	.0000	.0000	.0000	.0000	.0000
55	MT EXCHG	9931	.0000	.0000	.0000	.0000	.0000	.0000
56	BLD LINE	9931	.0000	.0000	.0000	.0000	.0000	.0000
57	PHI CHRG	9932	.0000	.0000	.0000	.0000	.0000	.0000
58	LFT CHRG	9933	.0000	.0000	.0000	.0000	.0000	.0000
59	RMT CHRG	9934	.0000	.0000	.0000	.0000	.0000	.0000
60	CART 1	9935	.0000	.0000	.0000	.0000	.0000	.0000
61	CART 2	9936	.0000	.0000	.0000	.0000	.0000	.0000
62	GUN CAM	9937	.0000	.0000	.0000	.0000	.0000	.0000
63	REM RMT	9938	.0000	.0000	.0000	.0000	.0000	.0000
64	SEAT RMT	9939	.0000	.0000	.0000	.0000	.0000	.0000
65	LFT CRAT	9940	.0000	.0000	.0000	.0000	.0000	.0000
66	RMT CRAT	9941	.0000	.0000	.0000	.0000	.0000	.0000

VIEW NUMBER 21  
AZ = 315.0 EL = -45.0

REVERSE  
YES

NUMBER OF COMPONENTS  
TOTAL 1368  
CRITICAL 66

TIME (SEC.) 10.00  
SCALE FACTOR 10000.0

PRESENTED AREAS AND TRUE COMPONENT VULNERABLE AREAS (SQUARE FEET) PER TIME INCREMENT

INDEX	COMPONENT NAME	NUMBER	PRESENTED AREA	1.00	1.50	2.00	4.00	6.00	8.00	10.00	21.00
1	HEAD	2001	.25000	.0000	.2500	.2500	.2500	.2500	.2500	.2500	.2500
2	THORAX	2002	.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
3	ABDOMEN	2003	1.25000	.0000	.0000	.0000	.2500	.2500	.2500	.2500	.2500
4	PELVIS	2004	1.00000	.0000	.0000	.0000	.0000	.5000	.5000	.5000	.7500
5	LEFT ARM	2005	.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
6	RIGHT ARM	2006	.50000	.0000	.2500	.2500	.2500	.5000	.5000	.5000	.5000
7	LEFT LEG	2007	1.75000	.0000	.0000	.0000	.2500	.5000	.5000	.7500	.7500
8	RIGHT LEG	2008	1.25000	.5000	.5000	.7500	1.2500	1.2500	1.2500	1.2500	1.2500
9	STK GRIP	3001	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10	STK SENS	3002	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11	STK YOKE	3003	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
12	LFT STAR	3137	1.00000	.0000	.0000	.0000	.0000	.0000	.0000	.2500	.0000
13	RHT STAR	3237	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
14	H1 FLUID	3503	.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
15	H1 MANIF	3504	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
16	H1 FILTR	3505	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
17	H1 COOLR	3506	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
18	H1 PUMP	3511	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
19	H1 PRESF	3514	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
20	H1 PRESR	3515	.50000	.0000	.0000	.2500	.2500	.5000	.5000	.7500	.7500
21	H2 FLUID	3603	.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
22	H2 MANIF	3604	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
23	H2 FILTR	3605	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
24	H2 COOLR	3606	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
25	H2 PUMP	3611	1.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
26	H2 PRESF	3614	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
27	H2 PRESR	3615	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
28	H2 FLUID	3677	1.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
29	FUEL 1-A	4004	9.25000	4.5000	5.5000	7.0000	7.0000	7.0000	7.2500	7.5000	9.0000
30	FUEL 1-B	4005	18.00000	.2500	.7500	3.5000	4.7500	4.7500	5.5000	5.7500	10.0000
31	FUEL 1-C	4006	18.00000	.0000	.0000	1.5000	1.7500	2.0000	2.0000	2.0000	2.5000
32	FUEL 1-D	4007	17.00000	.0000	.2500	1.2500	1.7500	1.7500	1.7500	1.7500	2.5000
33	FUEL 1-E	4008	16.50000	.0000	.0000	1.2500	1.7500	2.0000	2.0000	2.0000	2.0000
34	FUEL 2-A	4014	9.50000	.0000	.0000	4.0000	5.5000	5.5000	5.7500	5.7500	6.0000
35	FUEL 2-B	4015	10.00000	.0000	.0000	.7500	1.2500	1.2500	1.2500	1.5000	1.5000
36	FUEL 2-C	4016	10.00000	.0000	.0000	.5000	1.0000	1.2500	1.2500	1.2500	1.2500
37	FUEL 2-D	4017	10.00000	.0000	.0000	.5000	.7500	1.0000	1.0000	1.0000	1.0000
38	FUEL 2-E	4018	9.00000	.0000	.0000	.0000	.2500	.2500	.2500	.2500	.2500
39	FUEL 3-A	4024	8.50000	.0000	.0000	1.7500	3.2500	3.7500	3.7500	4.0000	5.7500
40	FUEL 3-B	4025	8.75000	.0000	.0000	.5000	.7500	.7500	.7500	.7500	1.0000
41	FUEL 3-C	4026	9.25000	.0000	.0000	.2500	.5000	.7500	.7500	.7500	1.2500
42	FUEL 3-D	4027	7.75000	.0000	.0000	.2500	.7500	.7500	.7500	.7500	.7500
43	FUEL 3-E	4028	7.25000	.0000	.0000	.0000	.0000	.2500	.2500	.2500	.2500
44	FUEL 4-A	4034	16.75000	.0000	1.0000	3.7500	6.7500	8.5000	8.7500	9.0000	10.2500
45	FUEL 4-B	4035	22.75000	.0000	.2500	2.7500	5.0000	5.5000	5.5000	5.5000	6.0000
46	FUEL 4-C	4036	34.00000	.0000	1.2500	4.5000	6.7500	7.5000	8.2500	8.2500	9.2500
47	FUEL 4-D	4037	34.00000	.0000	.0000	.2500	.7500	1.0000	1.0000	1.0000	1.2500
48	FUEL 4-E	4038	30.50000	.0000	.0000	.0000	.0000	.2500	.2500	.2500	.5000
49	LFT FLIA	4215	.25000	.0000	.0000	.0000	.0000	.2500	.2500	.2500	.2500
50	RHT FLIA	4216	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
51	LFT FUEL	4221	.75000	.2500	.2500	.2500	.7500	.7500	.7500	.7500	.7500

**A-75**

VIEW NUMBER 22 REVERSED  
AZ = 180.0 EL = 45.0  
TOTAL CRITICAL 86  
TIME (SEC.) FLOW (WASH, CM.)  
10.00 1000.0

PRESENTED AREAS AND TRUE COMPONENT VULNERABLE AREAS (SQUARE FEET) PER TIME INCREMENT

INDEX	COMPONENT NAME	NUMBER	PRESENTED AREA	TOTAL CRITICAL	TIME INCREMENTS									
					2.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00	18.00	20.00
1	HEAD	2001	.25000	.500	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
2	THORAX	2002	1.00000	.2500	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
3	ABDOMEN	2003	1.00000	.5000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
4	PELVIS	2004	1.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
5	LEFT ARM	2005	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
6	RIGHT ARM	2006	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
7	LEFT LEG	2007	.75000	.2500	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
8	RIGHT LEG	2008	1.00000	.2500	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
9	STR GRIP	3001	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10	STR BENS	3002	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11	STR YOKE	3003	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
12	LFT STAR	3137	.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
13	RHT STAR	3237	.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
14	M1 FLUID	3503	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
15	M1 MANIF	3504	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
16	M1 FLTR	3505	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
17	M1 COCLR	3506	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
18	M1 PUMP	3511	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
19	M1 PRESF	3514	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
20	M1 PRESR	3515	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
21	M2 FLUID	3603	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
22	M2 MANIF	3604	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
23	M2 FLTR	3605	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
24	M2 COCLR	3606	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
25	M2 PUMP	3611	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
26	M2 PRESF	3614	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
27	M2 PRESR	3615	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
28	M1 FLUID	3877	1.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
29	FUEL 1-A	4004	6.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
30	FUEL 1-B	4005	17.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
31	FUEL 1-C	4006	17.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
32	FUEL 1-D	4007	15.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
33	FUEL 1-E	4008	15.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
34	FUEL 2-A	4014	6.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
35	FUEL 2-B	4015	6.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
36	FUEL 2-C	4016	6.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
37	FUEL 2-D	4017	8.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
38	FUEL 2-E	4018	10.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
39	FUEL 3-A	4024	6.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
40	FUEL 3-B	4025	6.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
41	FUEL 3-C	4026	6.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
42	FUEL 3-D	4027	6.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
43	FUEL 3-E	4028	7.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
44	FUEL 4-A	4034	12.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
45	FUEL 4-B	4035	20.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
46	FUEL 4-C	4036	31.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
47	FUEL 4-D	4037	31.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
48	FUEL 4-E	4038	29.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
49	LFT FLTR	4215	.50000	.2500	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
50	RHT FLTR	4216	.50000	.2500	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
51	LFT FUEL	4221	.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

52	WMT FUEL	4232
53	VENT YAK	4602
54	OXYGEN	9402
55	WT EXCHG	9917
56	OLD LINE	9931
57	PRI CHRG	9932
58	LFT CHRG	9933
59	WMT CHRG	9934
60	CART 1	9935
61	CART 2	9936
62	GUN CART	9937
63	REM RMT	9938
64	SEAT RMT	9939
65	LFT CRT	9940
66	RMT CRT	9941



VIEW NUMBER 23  
AZ = 225.0 EL = 45.0

REVERSED  
YES

NUMBER OF COMPONENTS  
TOTAL CRITICAL  
1368 66

FLUX TABLE  
TIME (SEC.) FLUX (W/SQ. CM.)  
10.00 10000.0

PRESENTED AREAS AND TRUE COMPONENT VULNERABLE AREAS (SQUARE FEET) PER TIME INCREMENT

INDEX	COMPONENT NAME	NUMBER	PRESENTED AREA	1.00	1.50	2.00	4.00	6.00	10.00	20.00
1	HEAD	2001	.25000	.2500	.2500	.2500	.2500	.2500	.2500	.2500
2	THORAX	2002	.75000	.7500	.7500	.7500	.7500	.7500	.7500	.7500
3	ABDOMEN	2003	1.25000	.2500	.2500	.2500	.2500	.2500	.2500	.2500
4	PELVIS	2004	1.00000	.5000	.5000	.5000	.5000	.5000	.5000	.5000
5	LEFT ARM	2005	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
6	WITE ARM	2006	.50000	.5000	.5000	.5000	.5000	.5000	.5000	.5000
7	LEFT LEG	2007	1.25000	.2500	.2500	.2500	.2500	.2500	.2500	.2500
8	WITE LEG	2008	1.75000	.7500	.7500	.7500	.7500	.7500	.7500	.7500
9	STK GRIP	3001	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10	STK BENS	3002	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11	STK YOKE	3003	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
12	LFT STAB	3137	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
13	RMT STAB	3237	1.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
14	M1 FLUID	3503	.75000	.2500	.2500	.2500	.2500	.2500	.2500	.2500
15	M1 MANIF	3504	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
16	M1 FLTR	3505	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
17	M1 COOLR	3506	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
18	M1 PUMP	3511	.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
19	M1 PRESF	3514	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
20	M1 PRESR	3515	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
21	M2 FLUID	3603	1.00000	.2500	.2500	.2500	.2500	.2500	.2500	.2500
22	M2 MANIF	3604	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
23	M2 FLTR	3605	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
24	M2 COOLR	3606	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
25	M2 PUMP	3611	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
26	M2 PRESF	3614	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
27	M2 PRESR	3615	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
28	M1 FLUID	3817	1.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
29	FUEL 1-A	4004	9.25000	.0000	.7500	1.2500	1.2500	1.2500	1.2500	1.2500
30	FUEL 1-B	4005	18.00000	.2500	1.5000	1.5000	1.7500	1.7500	1.7500	1.7500
31	FUEL 1-C	4006	18.00000	1.2500	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000
32	FUEL 1-D	4007	17.00000	1.7500	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000
33	FUEL 1-E	4008	16.50000	2.2500	5.7500	14.0000	14.7500	14.7500	14.7500	15.0000
34	FUEL 2-A	4018	8.50000	.0000	.0000	.0000	.2500	.2500	.5000	1.0000
35	FUEL 2-B	4015	10.00000	.0000	.0000	.0000	.7500	1.2500	1.5000	1.5000
36	FUEL 2-C	4016	10.00000	.0000	.7500	.7500	.7500	1.0000	1.0000	1.2500
37	FUEL 2-D	4017	10.00000	1.0000	1.2500	1.5000	1.5000	1.5000	1.5000	1.5000
38	FUEL 2-E	4014	9.00000	1.0000	2.2500	7.2500	7.7500	8.0000	8.0000	8.2500
39	FUEL 3-A	4024	8.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
40	FUEL 3-B	4025	8.75000	.0000	.0000	.0000	.2500	.2500	.2500	.2500
41	FUEL 3-C	4026	9.25000	.0000	.2500	.2500	.2500	1.0000	1.0000	1.0000
42	FUEL 3-D	4027	8.75000	.7500	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000
43	FUEL 3-E	4028	7.25000	.5000	1.5000	5.0000	5.5000	5.7500	6.2500	6.7500
44	FUEL 4-A	4034	16.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
45	FUEL 4-B	4035	23.00000	.0000	.2500	.7500	.7500	.7500	1.0000	1.2500
46	FUEL 4-C	4036	34.00000	.0000	.5000	.5000	.7500	1.0000	1.5000	2.0000
47	FUEL 4-D	4037	34.00000	3.5000	5.0000	5.0000	6.2500	7.0000	7.2500	9.0000
48	FUEL 4-E	4038	30.50000	16.7500	17.5000	23.5000	26.7500	26.7500	28.7500	29.7500
49	LFT FLTA	4215	.25000	.2500	.2500	.2500	.2500	.2500	.2500	.2500
50	RMT FLTA	4216	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
51	LFT FUEL	4221	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

LINE	ITEM	QTY	UNIT	PRICE	TOTAL	TAX	NET	GST	GRAND
52	WT FUEL	4222		75000	316650	0000	316650	0000	316650
53	VENT TANK	4602		35000	160580	0000	160580	0000	160580
54	QTYEAL	9402		125000	117500	0000	117500	0000	117500
55	WT EXCHG	9917		100000	99170	0000	99170	0000	99170
56	BLD LINE	9931		125000	125000	0000	125000	0000	125000
57	PAI CMRG	9932		00000	00000	0000	00000	0000	00000
58	LFT CMRG	9933		00000	00000	0000	00000	0000	00000
59	RMT CMRG	9934		00000	00000	0000	00000	0000	00000
60	CARTR 1	9935		25000	25000	0000	25000	0000	25000
61	CARTR 2	9936		00000	00000	0000	00000	0000	00000
62	GUN CART	9937		00000	00000	0000	00000	0000	00000
63	REM MAT	9938		25000	25000	0000	25000	0000	25000
64	SEAT MAT	9939		00000	00000	0000	00000	0000	00000
65	LFT CRAT	9940		00000	00000	0000	00000	0000	00000
66	RMT CRAT	9941		00000	00000	0000	00000	0000	00000

VIA NUMBER 24  
 AZ = 270.0 EL = 45.0  
 REVERSED  
 YES  
 SIMPLE OF COMPONENTS  
 TOTAL CRITICAL  
 1368 66  
 TIME (SEC.) FLOW (W/SQ. FT.)  
 10.00 10000.0

PRESENTED AREAS AND TRUE COMPONENT VULNERABLE AREAS (SQUARE FEET) PER TIME INCREMENT

INDEX	COMPONENT NAME	NUMBER	PRESENTED AREA	TIME INCREMENTS										A.C.	10.00	20.00
				1.50	2.00	2.50	3.00	3.50	4.00	4.50	5.00	5.50	6.00			
1	HEAD	2001	.75000	.2500	.7500	.7500	.7500	.7500	.7500	.7500	.7500	.7500	.7500	.7500	.7500	.7500
2	THORAX	2002	1.00000	.7500	.7500	.7500	.7500	.7500	.7500	.7500	.7500	.7500	.7500	.7500	.7500	.7500
3	ABDOMEN	2003	1.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
4	PELVIS	2004	.75000	.2500	.2500	.2500	.2500	.2500	.2500	.2500	.2500	.2500	.2500	.2500	.2500	.2500
5	LEFT ARM	2005	1.00000	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000	.5000
6	RIGHT ARM	2006	.50000	.2500	.2500	.2500	.2500	.2500	.2500	.2500	.2500	.2500	.2500	.2500	.2500	.2500
7	LEFT LEG	2007	2.00000	.7500	.7500	.7500	.7500	.7500	.7500	.7500	.7500	.7500	.7500	.7500	.7500	.7500
8	RIGHT LEG	2008	2.00000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
9	STK GRIP	3001	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10	STK BENS	3002	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11	STK YOKE	3003	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
12	LFT STAB	3137	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
13	RHT STAB	3237	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
14	M1 FLUID	3503	.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
15	M1 MANIF	3504	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
16	M1 FILTR	3505	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
17	M1 COOLR	3506	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
18	M1 PUMP	3511	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
19	M1 PRESF	3514	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
20	M1 PRESR	3515	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
21	M2 FLUID	3603	1.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
22	M2 MANIF	3604	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
23	M2 FILTR	3605	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
24	M2 COOLR	3606	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
25	M2 PUMP	3611	1.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
26	M2 PRESF	3614	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
27	M2 PRESR	3615	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
28	M1 FLUID	3A77	1.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
29	FUEL 1-A	4004	7.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
30	FUEL 1-B	4005	18.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
31	FUEL 1-C	4006	18.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
32	FUEL 1-D	4007	15.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
33	FUEL 1-E	4008	15.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
34	FUEL 2-A	4014	9.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
35	FUEL 2-B	4015	9.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
36	FUEL 2-C	4016	9.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
37	FUEL 2-D	4017	9.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
38	FUEL 2-E	4018	9.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
39	FUEL 3-A	4024	9.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
40	FUEL 3-B	4025	9.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
41	FUEL 3-C	4026	9.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
42	FUEL 3-D	4027	7.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
43	FUEL 3-E	4028	7.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
44	FUEL 4-A	4034	18.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
45	FUEL 4-B	4035	24.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
46	FUEL 4-C	4036	31.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
47	FUEL 4-D	4037	35.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
48	FUEL 4-E	4038	28.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
49	LFT FLIN	4215	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
50	RHT FLIN	4216	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
51	LFT FUEL	4221	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

LINE	ITEM	QTY	UNIT	PRICE	TOTAL
52	RMT FUEL	4222	0.0000	0.0000	0.0000
53	VENT TWR	4602	3.25000	7.500	34.12500
54	OXYGEN	9402	1.25000	0.000	0.000
55	WT EXCHG	9917	1.00000	0.000	0.000
56	BLD LINE	9931	0.00000	0.000	0.000
57	PRI CHRG	9932	0.00000	0.000	0.000
58	LFT CHRG	9933	0.00000	0.000	0.000
59	RMT CHRG	9734	0.25000	0.000	0.000
60	CART 1	9935	0.00000	0.000	0.000
61	CART 2	9936	0.00000	0.000	0.000
62	GUN CART	9937	0.00000	0.000	0.000
63	HEM RMT	9938	0.25000	0.000	0.000
64	SEAT RMT	9939	0.50000	0.000	0.000
65	LFT CRKT	9940	0.00000	0.000	0.000
66	RMT CRKT	9941	0.00000	0.000	0.000

VIEW NUMBER 25  
A2 = 315.0 EL = 45.0  
REVERSED  
YES  
NUMBER OF COMPONENTS  
TOTAL CRITICAL  
1366  
66  
FLUX TABLE  
TIME (SEC.) FLUX (W/SQ.CM.)  
10.00 10000.0

PRESENTEL AREAS AND TRUE COMPONENT VULNERABLE AREAS (SQUARE FEET) PER TIME INCREMENT

INDEX	COMPONENT NAME	PRESENTED AREA	50	1.00	1.50	2.00	4.00	6.00	10.00	20.00
1	HEAD	2001	.50000	.2500	.5000	.5000	.5000	.5000	.5000	.5000
2	THORAX	2002	.75000	.2500	.7500	.2500	.2500	.2500	.2500	.2500
3	ABDOMEN	2003	1.25000	.7500	.7500	.7500	.7500	.7500	.7500	.7500
4	PELVIS	2004	1.50000	.2500	.5000	.5000	.7500	.7500	.7500	.7500
5	LEFT ARM	2005	.75000	.2500	.2500	.2500	.2500	.2500	.5000	.7500
6	RIGHT ARM	2006	1.00000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
7	LEFT LEG	2007	1.50000	.2500	.5000	.5000	.5000	.7500	1.2500	1.2500
8	RIGHT LEG	2008	1.00000	.5000	.7500	.7500	1.0000	1.0000	1.0000	1.0000
9	STK GRIP	3001	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10	STK SENS	3002	.25000	.0000	.0000	.0000	.0000	.0000	.2500	.2500
11	STK YOKE	3003	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
12	LFT STAB	3137	.75000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
13	RHT STAB	3237	1.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
14	M1 FLUID	3503	.75000	.2500	.2500	.2500	.5000	.5000	.5000	.5000
15	M1 MANIF	3504	.75000	.0000	.0000	.0000	.2500	.2500	.2500	.2500
16	M1 FILTR	3505	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
17	M1 CGLR	3506	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
18	M1 PUMP	3511	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
19	M1 PRESF	3514	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
20	M1 PRESF	3515	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
21	M2 FLUID	3603	.75000	.5000	.5000	.5000	.7500	.7500	.7500	.7500
22	M2 MANIF	3604	.50000	.0000	.0000	.0000	.5000	.5000	.5000	.5000
23	M2 FILTR	3605	.25000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
24	M2 COOLR	3606	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
25	M2 PUMP	3611	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
26	M2 PRESF	3614	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
27	M2 PRESF	3615	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
28	M1 FLUID	3877	1.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
29	FUEL 1-A	4004	9.50000	.0000	.7500	1.0000	1.5000	1.7500	1.7500	1.7500
30	FUEL 1-B	4005	17.75000	.2500	1.7500	2.5000	2.7500	2.7500	3.0000	3.0000
31	FUEL 1-C	4006	17.75000	1.0000	2.5000	2.7500	2.7500	2.7500	3.0000	3.2500
32	FUEL 1-D	4007	17.25000	2.0000	2.5000	2.5000	2.7500	2.7500	3.0000	3.5000
33	FUEL 1-E	4008	16.75000	3.0000	8.5000	15.7500	16.2500	16.2500	16.2500	16.2500
34	FUEL 2-A	4014	9.00000	.0000	.0000	.0000	.2500	.5000	.5000	.5000
35	FUEL 2-B	4015	9.75000	.0000	.2500	.2500	.5000	1.2500	1.2500	1.2500
36	FUEL 2-C	4016	9.50000	.0000	.5000	.7500	.7500	.7500	.7500	.7500
37	FUEL 2-D	4017	10.00000	.0000	1.2500	1.2500	1.2500	1.2500	1.2500	1.5000
38	FUEL 2-E	4018	9.25000	.5000	1.7500	6.7500	7.0000	7.2500	7.2500	7.5000
39	FUEL 3-A	4024	6.75000	.0000	.0000	.0000	.2500	.5000	.5000	.7500
40	FUEL 3-B	4025	6.75000	.0000	.0000	.0000	.2500	.5000	.7500	.7500
41	FUEL 3-C	4026	9.25000	.0000	.2500	.2500	.2500	.5000	.7500	.7500
42	FUEL 3-D	4027	9.50000	.2500	2.2500	2.5000	2.5000	2.5000	2.5000	2.5000
43	FUEL 3-E	4028	7.25000	.0000	1.2500	3.7500	4.7500	4.7500	5.2500	6.0000
44	FUEL 4-A	4034	16.75000	.0000	.0000	.0000	.0000	.0000	.0000	.2500
45	FUEL 4-B	4035	24.75000	.0000	.5000	.7500	1.5000	1.5000	1.5000	1.7500
46	FUEL 4-C	4036	34.50000	.0000	1.0000	1.0000	1.5000	2.0000	2.2500	2.2500
47	FUEL 4-D	4037	34.25000	3.2500	4.5000	4.5000	5.5000	6.5000	7.0000	7.5000
48	FUEL 4-E	4038	29.25000	17.5000	17.7500	24.0000	26.5000	26.7500	27.5000	28.0000
49	LFT FLIA	4215	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
50	RHT FLIA	4216	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
51	LFT FUEL	4221	.50000	.0000	.0000	.0000	.0000	.0000	.0000	.0000



VIEW ALIGNED 20

AZ = 270.0 EL = 90.0

NUMBER OF COMPONENTS  
TOTAL CRITICAL  
1366 66FLUX TABLE  
TIME (SEC.) FLUX (W/SG.CW.)  
10.00 10000.0

## PRESENTED AREAS AND TRUE COMPONENT VULNERABLE AREAS (SQUARE FEET) PER TIME INCREMENT

INDEX	COMPONENT NAME	NUMBER	PRESENTED AREA	REVERSED YES	NUMBER OF COMPONENTS TOTAL CRITICAL	TIME (SEC.)	FLUX (W/SG.CW.)
1	HEAD	2001	.50000		1366	10.00	10000.0
2	TWORAX	2002	1.00000		66	10.00	10000.0
3	ABDOMEN	2003	1.00000		66	10.00	10000.0
4	PELVIS	2004	.75000		66	10.00	10000.0
5	LEFT ARM	2005	.25000		66	10.00	10000.0
6	WITE ARM	2006	.75000		66	10.00	10000.0
7	LEFT LEG	2007	1.25000		66	10.00	10000.0
8	WITE LEG	2008	1.25000		66	10.00	10000.0
9	STA GRIP	3001	.00000		66	10.00	10000.0
10	STA SENS	3002	.00000		66	10.00	10000.0
11	STA YOKE	3003	.00000		66	10.00	10000.0
12	LFT STAB	3137	.50000		66	10.00	10000.0
13	RHT STAB	3237	.50000		66	10.00	10000.0
14	M1 FLUID	3503	1.00000		66	10.00	10000.0
15	M1 MANIF	3504	.00000		66	10.00	10000.0
16	M1 FILTR	3505	.25000		66	10.00	10000.0
17	M1 COOLR	3506	.25000		66	10.00	10000.0
18	M1 PUMP	3511	.00000		66	10.00	10000.0
19	M1 PRESF	3514	.00000		66	10.00	10000.0
20	M1 PRESR	3515	.25000		66	10.00	10000.0
21	M2 FLUID	3603	1.00000		66	10.00	10000.0
22	M2 MANIF	3604	.00000		66	10.00	10000.0
23	M2 FILTR	3605	.25000		66	10.00	10000.0
24	M2 COOLR	3606	.25000		66	10.00	10000.0
25	M2 PUMP	3611	.75000		66	10.00	10000.0
26	M2 PRESF	3614	.00000		66	10.00	10000.0
27	M2 PRESR	3615	.00000		66	10.00	10000.0
28	WY FLUID	3877	1.00000		66	10.00	10000.0
29	FUEL 1-A	4004	7.00000		66	10.00	10000.0
30	FUEL 1-B	4005	21.00000		66	10.00	10000.0
31	FUEL 1-C	4006	21.00000		66	10.00	10000.0
32	FUEL 1-D	4007	21.00000		66	10.00	10000.0
33	FUEL 1-E	4008	21.00000		66	10.00	10000.0
34	FUEL 2-A	4014	10.50000		66	10.00	10000.0
35	FUEL 2-B	4015	10.50000		66	10.00	10000.0
36	FUEL 2-C	4016	10.50000		66	10.00	10000.0
37	FUEL 2-D	4017	10.50000		66	10.00	10000.0
38	FUEL 2-E	4018	10.50000		66	10.00	10000.0
39	FUEL 3-A	4024	10.50000		66	10.00	10000.0
40	FUEL 3-B	4025	10.50000		66	10.00	10000.0
41	FUEL 3-C	4026	10.50000		66	10.00	10000.0
42	FUEL 3-D	4027	10.50000		66	10.00	10000.0
43	FUEL 3-E	4028	10.50000		66	10.00	10000.0
44	FUEL 4-A	4034	16.75000		66	10.00	10000.0
45	FUEL 4-B	4035	28.75000		66	10.00	10000.0
46	FUEL 4-C	4036	42.75000		66	10.00	10000.0
47	FUEL 4-D	4037	42.75000		66	10.00	10000.0
48	FUEL 4-E	4038	39.75000		66	10.00	10000.0
49	LFT FLIA	4215	.00000		66	10.00	10000.0
50	HAT FLIA	4216	.00000		66	10.00	10000.0
51	LFT FUEL	4221	1.50000		66	10.00	10000.0

[illegible]



## -- 66 CRITICAL COMPONENT LOCATIONS --

INDEX	COMPONENT NAME	NUMBER	X-COORD.	SAMPLE	Y-COORD.	SAMPLE	Z-COORD.	SAMPLE
1	HEAD	2001	-6.57	5	.08	4	3.80	5
2	THORAX	2002	-6.57	5	.15	8	3.52	5
3	ABDOMEN	2003	-6.55	8	.14	7	3.36	7
4	PELVIS	2004	-6.46	4	.08	7	3.15	5
5	LEFT ARM	2005	-6.39	5	.38	2	3.34	5
6	RIGHT ARM	2006	-6.50	6	.08	6	3.43	6
7	LEFT LEG	2007	-5.96	11	.23	7	3.07	8
8	RIGHT LEG	2008	-5.98	11	.06	8	3.07	9
9	STK GRIP	3001	.00	0	.08	1	3.28	1
10	STK SENS	3002	.00	0	.08	1	3.12	1
11	STK YOKE	3003	.00	0	.02	5	2.85	5
12	LFT STAB	3137	.00	8	.99	6	2.97	6
13	RHT STAB	3237	-16.15	8	.84	6	2.97	6
14	M1 FLUID	3503	-14.02	6	.46	8	3.07	6
15	M1 MANIF	3504	-14.02	2	.00	0	3.12	2
16	M1 FILTR	3505	-13.49	2	.99	2	2.21	2
17	M1 COOLR	3506	-13.94	1	1.14	1	.00	0
18	M1 PUMP	3511	-14.10	2	.38	2	2.51	4
19	M1 PRESF	3514	.00	0	.00	0	.00	0
20	M1 PRESR	3515	-14.00	6	.99	2	2.44	4
21	M2 FLUID	3603	-14.02	6	.31	8	3.07	6
22	M2 MANIF	3604	-14.02	2	.00	0	3.12	2
23	M2 FILTR	3605	-13.49	2	.84	2	2.21	2
24	M2 COOLR	3606	-13.94	1	.99	1	.00	0
25	M2 PUMP	3611	-13.94	16	.69	6	2.67	10
26	M2 PRESF	3614	.00	0	.00	0	.00	0
27	M2 PRESR	3615	.00	0	.00	0	.00	0
28	M1 FLUID	3677	-12.60	4	.08	4	.00	0
29	FUEL 1-A	4004	-9.45	40	.08	49	2.67	33
30	FUEL 1-B	4005	-8.84	96	.08	91	2.97	19
31	FUEL 1-C	4006	-8.84	96	.08	91	3.12	19
32	FUEL 1-D	4007	-8.84	96	.06	91	3.26	19
33	FUEL 1-E	4008	-8.83	110	.08	104	3.52	46
34	FUEL 2-A	4014	-10.21	48	.06	51	2.51	15
35	FUEL 2-B	4015	-10.21	54	.08	56	2.74	25
36	FUEL 2-C	4016	-10.23	52	.08	53	2.97	13
37	FUEL 2-D	4017	-10.21	54	.08	56	3.20	26
38	FUEL 2-E	4018	-10.22	56	.08	58	3.51	30
39	FUEL 3-A	4024	-11.14	56	.08	56	2.44	26
40	FUEL 3-B	4025	-11.13	48	.08	51	2.67	15
41	FUEL 3-C	4026	-11.19	70	.05	80	2.90	34
42	FUEL 3-D	4027	-11.13	48	.08	51	3.12	15
43	FUEL 3-E	4028	-11.10	48	.06	54	3.35	30
44	FUEL 4-A	4034	-12.70	110	.08	108	2.54	84
45	FUEL 4-B	4035	-12.56	140	.08	138	2.82	48
46	FUEL 4-C	4036	-12.82	204	.08	204	2.97	66
47	FUEL 4-D	4037	-12.77	198	.08	226	3.12	70
48	FUEL 4-E	4038	-12.83	193	.08	195	3.32	58
49	LFT FLIN	4215	.00	0	.00	0	.00	0
50	RHT FLIN	4216	.00	0	.00	0	.00	0
51	LFT FUEL	4221	-13.53	7	.62	7	2.21	2
52	RHT FUEL	4222	-13.51	6	.23	7	2.21	1
53	VENT TANK	4602	-14.40	18	.08	8	2.82	20
54	OXYGEN	9402	-7.60	6	.30	9	2.65	11
55	MT EXCHG	9917	-10.82	10	.47	7	2.51	9
56	BLD LINE	9931	.00	0	.32	10	3.12	10

57	PRI CHRG	9932	0	.08	1	3.73	1
58	LFT CHRG	9933	0	.00	0	.00	0
59	RHT CHRG	9934	0	.00	0	.00	0
60	CARTM 1	9935	0	.00	0	.00	0
61	CARTM 2	9936	0	.00	0	.00	0
62	GUN CRT	9937	0	.00	0	.00	0
63	REM RKT	9938	1	.00	1	3.43	1
64	SEAT RKT	9939	1	.08	1	.00	0
65	LFT CRKT	9940	1	.00	0	3.43	1
66	RHT CRKT	9941	1	.00	0	3.43	1



INDEX	COMPONENT	NAME	NUMBER	LOOK-ANG	PRESENTED AREA	WIDTH	LOOK-ANG	PRESENTED AREA	WIDTH
6		RITE ANV	2006	INDEX	(SQ. METERS)	(METERS)	INDEX	(SQ. METERS)	(METERS)
10				1	.02	.15	11	.09	.30
13				4	.12	.34	14	.02	.15
16				7	.09	.30	17	.09	.30
19				10	.02	.15	20	.04	.30
22				13	.02	.15	23	.04	.30
25				16	.07	.26	26	.02	.15
				19					
				22					
				25					

INDEX	COMPONENT	NAME	NUMBER	LOOK-ANG	PRESENTED AREA	WIDTH	LOOK-ANG	PRESENTED AREA	WIDTH
7		LEFT LEG	2007	INDEX	(SQ. METERS)	(METERS)	INDEX	(SQ. METERS)	(METERS)
1				1	.12	.34	2	.09	.30
4				4	.19	.43	5	.16	.40
7				7	.12	.34	8	.09	.30
10				10	.05	.22	11	.04	.30
13				13	.12	.34	14	.05	.30
16				16	.14	.37	17	.12	.34
19				19	.12	.34	20	.19	.43
22				22	.09	.30	23	.09	.30
25				25	.16	.40	26	.12	.34

INDEX	COMPONENT	NAME	NUMBER	LOOK-ANG	PRESENTED AREA	WIDTH	LOOK-ANG	PRESENTED AREA	WIDTH
8		RITE LEG	2008	INDEX	(SQ. METERS)	(METERS)	INDEX	(SQ. METERS)	(METERS)
1				1	.12	.34	2	.12	.34
4				4	.19	.43	5	.12	.34
7				7	.16	.40	8	.19	.43
10				10	.07	.26	11	.12	.34
13				13	.09	.30	14	.07	.26
16				16	.14	.37	17	.09	.30
19				19	.16	.40	20	.19	.43
22				22	.12	.34	23	.14	.37
25				25	.12	.34	26	.12	.34

INDEX	COMPONENT	NAME	NUMBER	LOOK-ANG	PRESENTED AREA	WIDTH	LOOK-ANG	PRESENTED AREA	WIDTH
9		STR GRIP	3001	INDEX	(SQ. METERS)	(METERS)	INDEX	(SQ. METERS)	(METERS)
1				1	.00	.00	2	.02	.15
4				4	.00	.00	5	.02	.15
7				7	.02	.15	8	.00	.00
10				10	.02	.15	11	.02	.15
13				13	.02	.15	14	.02	.15
16				16	.00	.00	17	.02	.15
19				19	.00	.00	20	.00	.00
22				22	.02	.15	23	.02	.15
25				25	.02	.15	26	.00	.00

♦ ♦ ♦ COMPONENT ♦ ♦ ♦

INDEX	NAME	NUMBER	LOOK-ANG	PRESERVED AREA	WIDTH	LOOK-ANG	PRESERVED AREA	WIDTH
10	STR SENS	3002	INDEX	(SQ. METERS)	(METERS)	INDEX	(SQ. METERS)	(METERS)
			1	.00	.00	2	.02	.15
			4	.00	.00	5	.02	.15
			7	.02	.15	6	.00	.00
			10	.02	.15	11	.02	.15
			13	.02	.15	14	.02	.15
			16	.00	.00	17	.02	.15
			19	.02	.15	20	.00	.00
			22	.02	.15	23	.02	.15
			25	.02	.15	26	.00	.00

INDEX	NAME	NUMBER	LOOK-ANG	PRESERVED AREA	WIDTH	LOOK-ANG	PRESERVED AREA	WIDTH
11	STR YORE	3003	INDEX	(SQ. METERS)	(METERS)	INDEX	(SQ. METERS)	(METERS)
			1	.00	.00	2	.02	.15
			4	.00	.00	5	.02	.15
			7	.05	.22	8	.00	.00
			10	.12	.34	11	.07	.26
			13	.09	.30	14	.12	.34
			16	.00	.00	17	.04	.30
			19	.05	.22	20	.00	.00
			22	.02	.15	23	.05	.22
			25	.02	.15	26	.00	.00

INDEX	NAME	NUMBER	LOOK-ANG	PRESERVED AREA	WIDTH	LOOK-ANG	PRESERVED AREA	WIDTH
12	LFT STAB	3137	INDEX	(SQ. METERS)	(METERS)	INDEX	(SQ. METERS)	(METERS)
			1	.05	.22	2	.05	.22
			4	.05	.22	5	.09	.30
			7	.05	.22	8	.05	.22
			10	.02	.15	11	.05	.22
			13	.05	.22	14	.02	.15
			16	.05	.22	17	.05	.22
			19	.05	.22	20	.05	.22
			22	.05	.22	23	.12	.34
			25	.09	.30	26	.05	.22

INDEX	NAME	NUMBER	LOOK-ANG	PRESERVED AREA	WIDTH	LOOK-ANG	PRESERVED AREA	WIDTH
13	RMT STAB	3237	INDEX	(SQ. METERS)	(METERS)	INDEX	(SQ. METERS)	(METERS)
			1	.05	.22	2	.05	.22
			4	.05	.22	5	.05	.22
			7	.09	.30	6	.07	.26
			10	.02	.15	9	.12	.34
			13	.05	.22	12	.05	.22
			16	.05	.22	15	.05	.22
			19	.09	.30	18	.07	.26
			22	.05	.22	21	.12	.34
			25	.05	.22	24	.05	.22

INDEX	NAME	NUMBER	LOOK-ANG	PRESERVED AREA	WIDTH	LOOK-ANG	PRESERVED AREA	WIDTH
14	P1 FLUID	3503	INDEX	(SQ. METERS)	(METERS)	INDEX	(SQ. METERS)	(METERS)
			1	.09	.30	2	.05	.22
			4	.07	.26	5	.07	.26
			7	.07	.26	8	.07	.26
			10	.09	.30	11	.07	.26
			13	.07	.26	14	.04	.30
			16	.05	.22	17	.07	.26

** COMPONENT **			LOG-ANG PRESENTED AREA			LOG-ANG PRESENTED AREA			LOG-ANG PRESENTED AREA		
INDEX	NAME	NUMBER	INDEX	(SQ. METERS)	WIDTH (METERS)	INDEX	(SQ. METERS)	WIDTH (METERS)	INDEX	(SQ. METERS)	WIDTH (METERS)
15	MI	MANIF 3504	1	.00	.00	2	.00	.00	3	.05	.22
			4	.05	.22	5	.05	.22	6	.06	.00
			7	.05	.22	8	.05	.22	9	.07	.26
			10	.00	.00	11	.05	.22	12	.05	.22
			13	.05	.22	14	.00	.00	15	.05	.22
			16	.05	.22	17	.05	.22	18	.00	.00
			19	.05	.22	20	.05	.22	21	.07	.26
			22	.00	.00	23	.05	.22	24	.05	.22
			25	.05	.22	26	.00	.00			

♦ ♦ COMPONENT ♦ ♦ ♦	LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)	LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)
16 MI FILTR 3505						
	1	.02	.15	2	.05	.22
	4	.05	.22	5	.05	.22
	7	.05	.22	8	.02	.15
	10	.02	.15	11	.02	.15
	13	.05	.22	14	.02	.15
	16	.02	.15	17	.05	.22
	19	.05	.22	20	.02	.15
	22	.05	.22	23	.02	.15
	25	.05	.22	26	.02	.15
				3	.02	.15
				6	.05	.22
				9	.05	.22
				12	.02	.15
				15	.02	.15
				18	.05	.22
				21	.05	.22
				24	.05	.22

[illegible]

* * *	COMPONENT	* * *
INDEX	NAME	NUMBER
10	H1 PUMP	3511
LOOK-ANG INDEX	PRESERVED AREA (SQ. METERS)	WIDTH (METERS)
1	.00	.00
4	.02	.15
7	.07	.26
10	.02	.15
13	.02	.15
16	.02	.15
19	.07	.26
22	.02	.15
25	.00	.00
LOOK-ANG INDEX	PRESERVED AREA (SQ. METERS)	WIDTH (METERS)
2	.02	.15
5	.00	.00
8	.02	.15
11	.05	.22
14	.02	.15
17	.15	.15
20	.02	.15
23	.02	.15
26	.00	.00
LOCK-ANG INDEX	PRESERVED AREA (SQ. METERS)	WIDTH (METERS)
3	.02	.15
6	.05	.22
9	.02	.15
12	.02	.15
15	.05	.22
18	.05	.22
21	.02	.15
24	.02	.15

♦ ♦ ♦ COMPONENT ♦ ♦ ♦			
INDEX	NAME	NUMBER	
19	MI PRESS	3514	
	LOOK-ANG	PRESERVED AREA	WIDTH
	INDEX	(56. METERS)	(METERS)
	1	.00	.00
	LOOK-ANG	PRESERVED AREA	WIDTH
	INDEX	(56. METERS)	(METERS)
	2	.00	.00
	LOOK-ANG	PRESERVED AREA	WIDTH
	INDEX	(56. METERS)	(METERS)
	3	.00	.00
	LOOK-ANG	PRESERVED AREA	WIDTH
	INDEX	(56. METERS)	(METERS)
	3	.00	.00

1  
 4  
 12  
 15  
 16  
 21  
 24

.15  
 .22  
 .00  
 .15  
 .15  
 .22  
 .00

5  
 6  
 11  
 14  
 17  
 20  
 23  
 26

.05  
 .02  
 .02  
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 .07  
 .02  
 .02  
 .00

6  
 7  
 10  
 13  
 16  
 19  
 22  
 25

.05  
 .00  
 .00  
 .07  
 .00  
 .00  
 .00  
 .05

\*\*\* COMPONENT \*\*\*  
 INDEX NAME NUMBER  
 20 H1 PRESR 3515

LOOK-ANG PRESENTED AREA  
 INDEX (SQ. METERS) WIDTH (METERS)  
 3 .02 .15  
 6 .00 .00  
 9 .02 .15  
 12 .05 .22  
 15 .02 .15  
 18 .00 .00  
 21 .02 .15  
 24 .02 .15

LOOK-ANG PRESENTED AREA  
 INDEX (SQ. METERS) WIDTH (METERS)  
 2 .02 .15  
 5 .05 .22  
 8 .05 .22  
 11 .02 .15  
 14 .00 .00  
 17 .00 .00  
 20 .05 .22  
 23 .02 .15  
 26 .02 .15

LOOK-ANG PRESENTED AREA  
 INDEX (SQ. METERS) WIDTH (METERS)  
 1 .02 .15  
 4 .02 .15  
 7 .02 .15  
 10 .00 .00  
 13 .00 .00  
 16 .05 .22  
 19 .02 .15  
 22 .02 .15  
 25 .05 .22

\*\*\* COMPONENT \*\*\*  
 INDEX NAME NUMBER  
 21 H2 FLUID 3603

LOOK-ANG PRESENTED AREA  
 INDEX (SQ. METERS) WIDTH (METERS)  
 3 .07 .26  
 6 .05 .22  
 9 .07 .26  
 12 .05 .22  
 15 .04 .30  
 18 .05 .22  
 21 .07 .26  
 24 .09 .30

LOOK-ANG PRESENTED AREA  
 INDEX (SQ. METERS) WIDTH (METERS)  
 2 .05 .22  
 5 .07 .26  
 8 .09 .30  
 11 .09 .30  
 14 .09 .30  
 17 .09 .30  
 20 .09 .30  
 23 .07 .26  
 26 .09 .30

LOOK-ANG PRESENTED AREA  
 INDEX (SQ. METERS) WIDTH (METERS)  
 1 .09 .30  
 4 .09 .30  
 7 .09 .30  
 10 .09 .30  
 13 .09 .30  
 16 .05 .22  
 19 .09 .30  
 22 .05 .22  
 25 .07 .26

\*\*\* COMPONENT \*\*\*  
 INDEX NAME NUMBER  
 22 H2 MANIF 3604

LOOK-ANG PRESENTED AREA  
 INDEX (SQ. METERS) WIDTH (METERS)  
 3 .07 .26  
 6 .00 .00  
 9 .05 .22  
 12 .22 .22  
 15 .05 .22  
 18 .00 .00  
 21 .05 .22  
 24 .05 .22

LOOK-ANG PRESENTED AREA  
 INDEX (SQ. METERS) WIDTH (METERS)  
 2 .00 .00  
 5 .05 .22  
 8 .05 .22  
 11 .05 .22  
 14 .00 .00  
 17 .05 .22  
 20 .05 .22  
 23 .07 .26  
 26 .00 .00

LOOK-ANG PRESENTED AREA  
 INDEX (SQ. METERS) WIDTH (METERS)  
 1 .00 .00  
 4 .05 .22  
 7 .05 .22  
 10 .00 .00  
 13 .05 .22  
 16 .05 .22  
 19 .05 .22  
 22 .00 .00  
 25 .05 .22

\*\*\* COMPONENT \*\*\*  
 INDEX NAME NUMBER  
 23 H2 FILTR 3605

LOOK-ANG PRESENTED AREA  
 INDEX (SQ. METERS) WIDTH (METERS)  
 3 .05 .22  
 6 .05 .22  
 9 .02 .15  
 12 .02 .15  
 15 .05 .22  
 18 .05 .22  
 21 .02 .15  
 24 .02 .15

LOOK-ANG PRESENTED AREA  
 INDEX (SQ. METERS) WIDTH (METERS)  
 2 .05 .22  
 5 .05 .22  
 8 .05 .22  
 11 .05 .22  
 14 .02 .15  
 17 .02 .15  
 20 .05 .22  
 23 .05 .22  
 26 .02 .15

LOOK-ANG PRESENTED AREA  
 INDEX (SQ. METERS) WIDTH (METERS)  
 1 .02 .15  
 4 .02 .15  
 7 .05 .22  
 10 .02 .15  
 13 .02 .15  
 16 .02 .15  
 19 .05 .22  
 22 .05 .22  
 25 .05 .22

COMPONENT	NAME	NUMBER	LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)	LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)
24	H2 COULM	3606	1	.02	.15	2	.02	.15
			4	.02	.15	5	.02	.15
			7	.00	.00	8	.00	.00
			10	.00	.00	11	.00	.00
			13	.00	.00	14	.00	.00
			16	.00	.00	17	.00	.00
			19	.00	.00	20	.00	.00
			22	.02	.15	23	.00	.00
			25	.00	.00	26	.02	.15

COMPONENT	NAME	NUMBER	LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)	LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)
25	H2 PUMP	3611	1	.07	.26	2	.00	.00
			4	.07	.26	5	.09	.30
			7	.05	.22	8	.14	.37
			10	.00	.00	11	.02	.15
			13	.07	.26	14	.00	.00
			16	.12	.34	17	.07	.26
			19	.05	.22	20	.14	.37
			22	.00	.00	23	.02	.15
			25	.09	.30	26	.07	.26

COMPONENT	NAME	NUMBER	LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)	LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)
26	H2 PRESF	3614	1	.00	.00	2	.00	.00
			4	.02	.15	5	.05	.22
			7	.00	.00	8	.02	.15
			10	.00	.00	11	.00	.00
			13	.07	.26	14	.00	.00
			16	.00	.00	17	.07	.26
			19	.00	.00	20	.02	.15
			22	.00	.00	23	.02	.15
			25	.05	.22	26	.00	.00

COMPONENT	NAME	NUMBER	LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)	LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)
27	H2 PRESF	3615	1	.00	.00	2	.00	.00
			4	.00	.00	5	.02	.15
			7	.02	.15	8	.00	.00
			10	.00	.00	11	.00	.00
			13	.00	.00	14	.00	.00
			16	.00	.00	17	.00	.00
			19	.02	.15	20	.00	.00
			22	.00	.00	23	.00	.00
			25	.02	.15	26	.00	.00

COMPONENT	NAME	NUMBER	LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)	LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)
28	H2 FLUID	3677	1	.04	.30	2	.04	.30
			4	.09	.30	5	.09	.30
			7	.09	.30	8	.09	.30
			10	.00	.00	11	.00	.00



COMPONENT	INDEX	NAME	NUMBER	LOOK-ANG	PRESENTED AREA	WIDTH	LOOK-ANG	PRESENTED AREA	WIDTH
FUEL 1-A 4004	29			INDEX	(SQ. METERS)	(METERS)	INDEX	(SQ. METERS)	(METERS)
	13			1	.65	.81	2	.93	.96
	16			4	.65	.81	5	.86	.93
	19			7	.86	.93	8	.56	.81
	22			10	.49	.70	11	.75	.75
	25			13	.54	.75	14	.49	.70
				16	.28	.53	17	.56	.75
				19	.86	.93	20	.65	.81
				22	.93	.96	23	.88	.94
				25	.86	.93	26	.65	.81

COMPONENT	INDEX	NAME	NUMBER	LOOK-ANG	PRESENTED AREA	WIDTH	LOOK-ANG	PRESENTED AREA	WIDTH
FUEL 1-B 4005	30			INDEX	(SQ. METERS)	(METERS)	INDEX	(SQ. METERS)	(METERS)
	1			1	1.95	1.40	3	1.65	1.24
	4			4	1.67	1.29	6	1.54	1.26
	7			7	1.67	1.29	9	1.65	1.28
	10			10	.16	.40	12	.24	.53
	13			13	.30	.55	15	.30	.55
	16			16	.28	.53	14	1.54	1.26
	19			19	1.67	1.29	21	1.65	1.28
	22			22	1.63	1.28	24	1.67	1.29
	25			25	1.67	1.29			

COMPONENT	INDEX	NAME	NUMBER	LOOK-ANG	PRESENTED AREA	WIDTH	LOOK-ANG	PRESENTED AREA	WIDTH
FUEL 1-C 4006	31			INDEX	(SQ. METERS)	(METERS)	INDEX	(SQ. METERS)	(METERS)
	1			1	1.95	1.40	3	1.65	1.24
	4			4	1.67	1.29	6	1.63	1.26
	7			7	1.67	1.29	9	1.65	1.28
	10			10	.16	.40	12	.24	.53
	13			13	.30	.55	15	.30	.55
	16			16	.28	.53	18	1.63	1.28
	19			19	1.67	1.29	21	1.65	1.28
	22			22	1.46	1.21	24	1.67	1.29
	25			25	1.67	1.29			

COMPONENT	INDEX	NAME	NUMBER	LOOK-ANG	PRESENTED AREA	WIDTH	LOOK-ANG	PRESENTED AREA	WIDTH
FUEL 1-D 4007	32			INDEX	(SQ. METERS)	(METERS)	INDEX	(SQ. METERS)	(METERS)
	1			1	1.95	1.40	3	1.65	1.24
	4			4	1.67	1.29	6	1.63	1.26
	7			7	1.67	1.29	9	1.65	1.28
	10			10	.16	.40	12	.24	.53
	13			13	.30	.55	15	.30	.55
	16			16	.28	.53	18	1.63	1.28
	19			19	1.67	1.29	21	1.65	1.28
	22			22	1.46	1.21	24	1.67	1.29
	25			25	1.67	1.29			

COMPONENT	INDEX	NAME	NUMBER	LOOK-ANG	PRESENTED AREA	WIDTH	LOOK-ANG	PRESENTED AREA	WIDTH
				INDEX	(SQ. METERS)	(METERS)	INDEX	(SQ. METERS)	(METERS)
				1	1.95	1.40	3	1.65	1.24
				4	1.67	1.29	6	1.63	1.26
				7	1.67	1.29	9	1.65	1.28
				10	.16	.40	12	.24	.53
				13	.30	.55	15	.30	.55
				16	.28	.53	18	1.63	1.28
				19	1.67	1.29	21	1.65	1.28
				22	1.46	1.21	24	1.67	1.29
				25	1.67	1.29			

33	FUEL 1-B	WCH	INDEX	(SQ. METERS)	(METERS)	INDEX	(SQ. METERS)	(METERS)
			1	1.45	1.40	2	1.40	1.41
			4	1.34	1.16	5	1.54	1.24
			7	1.53	1.24	8	1.54	1.18
			10	.33	.57	11	.58	.76
			13	.58	.76	14	.33	.57
			16	.51	.71	17	.58	.76
			19	1.53	1.24	20	1.39	1.16
			22	1.46	1.21	23	1.56	1.25
			25	1.53	1.24	26	1.95	1.40

++	COMPONENT	++	INDEX	NAME	NUMBER	LOOK-ANG	PRESENTED AREA	WIDTH	LOOK-ANG	PRESENTED AREA	WIDTH
			34	FUEL 2-A	4014	INDEX	(SQ. METERS)	(METERS)	INDEX	(SQ. METERS)	(METERS)
						1	.98	.99	3	.84	.91
						4	.84	.91	6	.81	.90
						7	.88	.94	9	.84	.91
						10	.16	.40	12	.14	.37
						13	.21	.46	15	.21	.46
						16	.14	.37	18	.81	.90
						19	.88	.94	21	.84	.91
						22	.98	.99	24	.84	.91
						25	.88	.94			

++	COMPONENT	++	INDEX	NAME	NUMBER	LOOK-ANG	PRESENTED AREA	WIDTH	LOOK-ANG	PRESENTED AREA	WIDTH
			35	FUEL 2-B	4015	INDEX	(SQ. METERS)	(METERS)	INDEX	(SQ. METERS)	(METERS)
						1	.98	.94	3	.91	.95
						4	.84	.91	6	.81	.90
						7	.93	.96	9	.91	.95
						10	.33	.57	12	.24	.53
						13	.42	.65	15	.42	.65
						16	.26	.53	18	.61	.90
						19	.93	.96	21	.91	.95
						22	.98	.94	24	.84	.91
						25	.93	.96			

++	COMPONENT	++	INDEX	NAME	NUMBER	LOOK-ANG	PRESENTED AREA	WIDTH	LOOK-ANG	PRESENTED AREA	WIDTH
			36	FUEL 2-C	4016	INDEX	(SQ. METERS)	(METERS)	INDEX	(SQ. METERS)	(METERS)
						1	.98	.94	3	.88	.94
						4	.84	.91	6	.81	.90
						7	.93	.96	9	.88	.94
						10	.16	.40	12	.14	.37
						13	.21	.46	15	.21	.46
						16	.14	.37	18	.61	.90
						19	.93	.96	21	.88	.94
						22	.81	.90	24	.84	.91
						25	.93	.96			

++	COMPONENT	++	INDEX	NAME	NUMBER	LOOK-ANG	PRESENTED AREA	WIDTH	LOOK-ANG	PRESENTED AREA	WIDTH
			37	FUEL 2-D	4017	INDEX	(SQ. METERS)	(METERS)	INDEX	(SQ. METERS)	(METERS)
						1	.98	.94	3	.93	.96
						4	.84	.91	6	.81	.90
						7	.93	.96	9	.88	.94
						10	.33	.57	12	.24	.53
						13	.42	.65	15	.42	.65
						16	.26	.53	18	.61	.90
						19	.93	.96	21	.88	.94
									24	.84	.91

COMPONENT	INDEX	NAME	NUMBER	LOOK-ANG PRESENTED AREA (SQ. METERS)	WIDTH (METERS)	LOOK-ANG PRESENTED AREA (SQ. METERS)	WIDTH (METERS)	LOOK-ANG PRESENTED AREA (SQ. METERS)	WIDTH (METERS)
39 FUEL 2-E 4010	22			.81	.90	.43	.46	.24	.91
	25			.93	.90	.90	.99		
	1			.96	.99	.81	.90	3	.93
	4			.84	.91	.64	.91	6	.99
	7			.84	.91	.64	.91	9	.93
	10			.33	.57	.39	.63	12	.53
	13			.39	.63	.39	.63	15	.63
	16			.28	.53	.39	.63	18	.99
	19			.84	.91	.64	.91	21	.93
	22			.81	.90	.86	.93	24	.91
25			.84	.91	.94	.99			

COMPONENT	INDEX	NAME	NUMBER	LOOK-ANG PRESENTED AREA (SQ. METERS)	WIDTH (METERS)	LOOK-ANG PRESENTED AREA (SQ. METERS)	WIDTH (METERS)	LOOK-ANG PRESENTED AREA (SQ. METERS)	WIDTH (METERS)
39 FUEL 3-A 4024	1			.98	.99	.81	.90	3	.90
	4			.84	.91	.79	.91	6	.90
	7			.79	.89	.84	.91	9	.90
	10			.28	.53	.35	.59	12	.48
	13			.35	.59	.35	.59	15	.59
	16			.23	.46	.35	.59	18	.90
	19			.79	.89	.84	.91	21	.90
	22			.81	.90	.81	.90	24	.91
	25			.74	.84	.98	.99		

COMPONENT	INDEX	NAME	NUMBER	LOOK-ANG PRESENTED AREA (SQ. METERS)	WIDTH (METERS)	LOOK-ANG PRESENTED AREA (SQ. METERS)	WIDTH (METERS)	LOOK-ANG PRESENTED AREA (SQ. METERS)	WIDTH (METERS)
40 FUEL 3-B 4025	1			.98	.99	.81	.90	3	.90
	4			.84	.91	.81	.90	6	.90
	7			.81	.90	.81	.90	9	.90
	10			.16	.40	.21	.46	12	.37
	13			.21	.46	.16	.46	15	.46
	16			.14	.37	.21	.46	18	.90
	19			.81	.90	.84	.91	21	.90
	22			.81	.90	.81	.90	24	.91
	25			.81	.90	.98	.99		

COMPONENT	INDEX	NAME	NUMBER	LOOK-ANG PRESENTED AREA (SQ. METERS)	WIDTH (METERS)	LOOK-ANG PRESENTED AREA (SQ. METERS)	WIDTH (METERS)	LOOK-ANG PRESENTED AREA (SQ. METERS)	WIDTH (METERS)
41 FUEL 3-C 4026	1			.98	.99	.81	.90	3	.93
	4			.84	.91	.86	.93	6	.90
	7			.86	.93	.84	.91	9	.93
	10			.33	.57	.39	.63	12	.53
	13			.39	.63	.33	.57	15	.63
	16			.28	.53	.39	.63	18	.90
	19			.86	.93	.84	.91	21	.93
	22			.81	.90	.86	.93	24	.91
	25			.86	.93	.98	.99		

COMPONENT	INDEX	NAME	NUMBER	LOOK-ANG PRESENTED AREA (SQ. METERS)	WIDTH (METERS)	LOOK-ANG PRESENTED AREA (SQ. METERS)	WIDTH (METERS)	LOOK-ANG PRESENTED AREA (SQ. METERS)	WIDTH (METERS)
42 FUEL 3-D 4027	1			.98	.99	.77	.84	3	.94
	4			.72	.85	.61	.84	6	.90

INDEX	COMPONENT	NAME	NUMBER	LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)	LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)	LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)
43	FUEL 3-E	8028		7	.61	.91	4	.72	.85	9	.68	.94
				10	.16	.40	11	.25	.48	12	.14	.37
				13	.23	.46	14	.16	.40	15	.23	.48
				16	.14	.37	17	.23	.48	18	.16	.40
				19	.81	.90	20	.72	.85	21	.88	.94
				22	.77	.86	23	.66	.84	24	.72	.85
				25	.81	.90	26	.96	.94			

♦ ♦ ♦ COMPONENT  
INDEX NAME NUMBER  
43 FUEL 3-E 8028

LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)	LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)	LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)
1	.84	.91	2	.63	.79	3	.67	.82
4	.72	.85	5	.67	.82	6	.72	.85
7	.67	.82	8	.72	.85	9	.67	.82
10	.33	.57	11	.35	.54	12	.28	.53
13	.35	.59	14	.33	.57	15	.35	.54
16	.28	.53	17	.35	.57	18	.28	.53
19	.67	.82	20	.72	.85	21	.67	.82
22	.63	.74	23	.67	.82	24	.72	.85
25	.67	.82	26	.64	.91			

♦ ♦ ♦ COMPONENT  
INDEX NAME NUMBER  
44 FUEL 4-A 8034

LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)	LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)	LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)
1	1.56	1.25	2	1.35	1.16	3	1.56	1.25
4	1.72	1.31	5	1.56	1.25	6	1.14	1.07
7	1.56	1.25	8	1.72	1.31	9	1.56	1.25
10	.44	.64	11	.93	.96	12	1.00	1.00
13	.93	.96	14	.44	.66	15	.93	.96
16	1.00	1.00	17	.93	.96	18	1.14	1.07
19	1.56	1.25	20	1.72	1.31	21	1.56	1.25
22	1.35	1.16	23	1.56	1.25	24	1.72	1.31
25	1.56	1.25	26	1.56	1.25			

♦ ♦ ♦ COMPONENT  
INDEX NAME NUMBER  
45 FUEL 4-B 4035

LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)	LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)	LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)
1	2.67	1.63	2	2.07	1.44	3	2.30	1.52
4	2.28	1.51	5	2.11	1.45	6	1.88	1.37
7	2.14	1.46	8	2.28	1.51	9	2.30	1.52
10	.26	.51	11	.39	.63	12	.39	.63
13	.39	.63	14	.26	.51	15	.39	.63
16	.39	.63	17	.39	.63	18	1.88	1.37
19	2.14	1.46	20	2.28	1.51	21	2.30	1.52
22	2.07	1.44	23	2.30	1.52	24	2.24	1.51
25	2.11	1.45	26	2.67	1.63			

♦ ♦ ♦ COMPONENT  
INDEX NAME NUMBER  
46 FUEL 4-C 8036

LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)	LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)	LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)
1	3.97	1.99	2	2.95	1.72	3	3.21	1.79
4	2.86	1.70	5	3.16	1.78	6	2.95	1.72
7	3.16	1.78	8	2.86	1.70	9	3.21	1.79
10	.26	.51	11	.44	.66	12	.39	.63
13	.84	.66	14	.26	.51	15	.84	.66
16	.39	.63	17	.44	.66	18	2.95	1.72
19	3.16	1.78	20	2.86	1.70	21	3.21	1.79
22	2.95	1.72	23	3.21	1.79	24	2.68	1.70
25	3.16	1.78	26	3.97	1.99			

♦ ♦ COMPONENT ♦ ♦ ♦  
 INDEX NAME NUMBER  
 47 FUEL 4-D 4037

LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)	LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)
1	3.97	1.94	2	2.44	1.70
4	3.27	1.81	5	3.14	1.74
7	3.16	1.74	6	3.27	1.81
10	.26	.51	11	.44	.66
13	.44	.66	14	.26	.51
16	.39	.63	17	.44	.66
19	3.16	1.76	20	3.27	1.81
22	2.88	1.70	23	3.18	1.78
25	3.16	1.78	26	3.97	1.99

♦ ♦ COMPONENT ♦ ♦ ♦  
 INDEX NAME NUMBER  
 48 FUEL 4-E 4038

LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)	LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)
1	3.69	1.92	2	2.72	1.65
4	2.65	1.63	5	2.83	1.68
7	2.83	1.68	8	2.65	1.63
10	.23	.48	11	.51	.71
13	.51	.71	14	.23	.48
16	.51	.71	17	.51	.71
19	2.83	1.68	20	2.65	1.63
22	2.72	1.65	23	2.72	1.65
25	2.83	1.68	26	3.69	1.92

♦ ♦ COMPONENT ♦ ♦ ♦  
 INDEX NAME NUMBER  
 49 LFT FLIN 4215

LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)	LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)
1	.00	.00	2	.00	.00
4	.00	.00	5	.02	.15
7	.02	.15	8	.00	.00
10	.00	.00	11	.00	.00
13	.00	.00	14	.00	.00
16	.00	.00	17	.00	.00
19	.02	.15	20	.00	.00
22	.00	.00	23	.00	.00
25	.02	.15	26	.00	.00

♦ ♦ COMPONENT ♦ ♦ ♦  
 INDEX NAME NUMBER  
 50 RMT FLIN 4216

LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)	LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)
1	.00	.00	2	.00	.00
4	.00	.00	5	.02	.15
7	.02	.15	8	.00	.00
10	.00	.00	11	.00	.00
13	.00	.00	14	.00	.00
16	.00	.00	17	.00	.00
19	.02	.15	20	.00	.00
22	.00	.00	23	.00	.00
25	.02	.15	26	.00	.00

♦ ♦ COMPONENT ♦ ♦ ♦  
 INDEX NAME NUMBER  
 51 LFT FUEL 4221

LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)	LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)
1	.14	.37	2	.07	.26
4	.02	.15	5	.07	.26
7	.05	.22	8	.05	.22
10	.02	.15	11	.02	.15
13	.00	.00	14	.02	.15



INDEX	LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)
1	3	.05	.22
2	6	.04	.30
3	9	.07	.30
4	12	.00	.26
5	15	.12	.00
6	18	.07	.34
7	21	.00	.34
8	24	.07	.26
9	27	.00	.04
10	30	.05	.07
11	33	.00	.00
12	36	.00	.00

INDEX	LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)
1	3	.00	.00
2	6	.02	.15
3	9	.00	.15
4	12	.00	.00
5	15	.00	.00
6	18	.02	.15
7	21	.00	.00
8	24	.00	.00
9	27	.00	.00
10	30	.00	.00
11	33	.00	.00
12	36	.00	.00

INDEX	LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)
1	3	.04	.30
2	6	.07	.26
3	9	.00	.00
4	12	.12	.34
5	15	.07	.34
6	18	.00	.26
7	21	.00	.04
8	24	.05	.07
9	27	.00	.00
10	30	.00	.00
11	33	.00	.00
12	36	.00	.00

INDEX	LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)
1	3	.00	.00
2	6	.02	.15
3	9	.00	.15
4	12	.00	.00
5	15	.00	.00
6	18	.02	.15
7	21	.00	.00
8	24	.00	.00
9	27	.00	.00
10	30	.00	.00
11	33	.00	.00
12	36	.00	.00

INDEX	LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)
1	3	.00	.00
2	6	.00	.00
3	9	.12	.34
4	12	.07	.34
5	15	.00	.26
6	18	.00	.04
7	21	.12	.34
8	24	.09	.30
9	27	.07	.26
10	30	.00	.00
11	33	.00	.00
12	36	.00	.00

INDEX	LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)
1	3	.00	.00
2	6	.00	.00
3	9	.02	.15
4	12	.00	.15
5	15	.02	.00
6	18	.00	.00
7	21	.00	.00
8	24	.02	.15
9	27	.02	.15
10	30	.00	.00
11	33	.00	.00
12	36	.00	.00

INDEX	LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)
1	3	.00	.00
2	6	.00	.00
3	9	.00	.00
4	12	.00	.00
5	15	.00	.00
6	18	.00	.00
7	21	.00	.00
8	24	.02	.15
9	27	.00	.00
10	30	.00	.00
11	33	.00	.00
12	36	.00	.00

INDEX	LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)
1	3	.00	.00
2	6	.00	.00
3	9	.00	.00
4	12	.00	.00
5	15	.00	.00
6	18	.00	.00
7	21	.00	.00
8	24	.00	.00
9	27	.00	.00
10	30	.00	.00
11	33	.00	.00
12	36	.00	.00

INDEX	LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)
1	3	.00	.00
2	6	.02	.15
3	9	.00	.00
4	12	.00	.00
5	15	.00	.00
6	18	.00	.00
7	21	.00	.00
8	24	.00	.00
9	27	.00	.00
10	30	.00	.00
11	33	.00	.00
12	36	.00	.00

INDEX	LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)
1	3	.00	.00
2	6	.00	.00
3	9	.00	.00
4	12	.00	.00
5	15	.00	.00
6	18	.00	.00
7	21	.00	.00
8	24	.00	.00
9	27	.00	.00
10	30	.00	.00
11	33	.00	.00
12	36	.00	.00

INDEX	LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)
1	3	.00	.00
2	6	.00	.00
3	9	.02	.15
4	12	.00	.00
5	15	.00	.00
6	18	.00	.00
7	21	.02	.15
8	24	.00	.00
9	27	.00	.00
10	30	.00	.00
11	33	.00	.00
12	36	.00	.00

INDEX	LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)
1	3	.00	.00
2	6	.00	.00
3	9	.00	.00
4	12	.00	.00
5	15	.00	.00
6	18	.00	.00
7	21	.00	.00
8	24	.00	.00
9	27	.00	.00
10	30	.00	.00
11	33	.00	.00
12	36	.00	.00

INDEX	LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)
1	3	.00	.00
2	6	.00	.00
3	9	.00	.00
4	12	.00	.00
5	15	.00	.00
6	18	.00	.00
7	21	.00	.00
8	24	.00	.00
9	27	.00	.00
10	30	.00	.00
11	33	.00	.00
12	36	.00	.00

INDEX	LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)
1	3	.07	.15
2	6	.02	.15
3	9	.00	.00
4	12	.00	.00
5	15	.00	.00
6	18	.00	.00
7	21	.00	.00
8	24	.00	.00
9	27	.00	.00
10	30	.00	.00
11	33	.00	.00
12	36	.00	.00

INDEX	LOOK-ANG INDEX	PRESENTED AREA (SQ. METERS)	WIDTH (METERS)
1	3	.00	.00
2	6	.00	.00
3	9	.02	.15
4	12	.00	.00
5	15	.00	.00
6	18	.00	.00
7	21	.00	.00
8	24	.02	.15
9	27	.02	.15
10	30	.00	.00
11	33	.00	.00
12	36	.00	.00





*** COMPONENT ***		LOOK-ANG PRESENTED AREA		LOOK-ANG PRESENTED AREA		LOOK-ANG PRESENTED AREA		LOOK-ANG PRESENTED AREA		LOOK-ANG PRESENTED AREA	
INDEX	NAME	INDEX	WIDTH (METERS)	INDEX	WIDTH (METERS)	INDEX	WIDTH (METERS)	INDEX	WIDTH (METERS)	INDEX	WIDTH (METERS)
10	9941	1	.00	2	.00	3	.00	4	.00	5	.00
13		4	.00	5	.00	6	.00	7	.00	8	.00
16		7	.00	8	.00	9	.00	10	.00	11	.00
19		10	.00	11	.00	12	.00	13	.00	14	.00
22		13	.02	14	.02	15	.02	16	.02	17	.02
25		16	.02	17	.02	18	.02	19	.02	20	.02
		19	.00	20	.00	21	.00	22	.00	23	.00
		22	.00	23	.00	24	.00	25	.00	26	.00
		25	.00	26	.00	27	.00	28	.00	29	.00

***** C O M P O N E N T P A R T C A T I O N S P O W A S A L I T *****														
INDEX		COMPONENT	NAME	NUMBER	.00	5.00	10.00	15.00	20.00	40.00	60.00	80.00	100.00	200.00
1		MEAC		2001	.00	.21	.61	.76	.76	.76	.76	.76	.76	.76
2		THORAX		2002	.00	.23	.31	.33	.33	.37	.36	.40	.41	.43
3		ABDOMEN		2003	.00	.09	.16	.22	.23	.27	.30	.31	.31	.34
4		PELVIS		2004	.00	.06	.25	.23	.25	.33	.47	.48	.50	.56
5		LEFT ARM		2005	.00	.32	.43	.47	.49	.40	.51	.52	.52	.65
6		RITE ARM		2006	.00	.30	.42	.43	.46	.49	.55	.56	.56	.60
7		LEFT LEG		2007	.00	.14	.21	.28	.31	.46	.52	.54	.62	.71
8		RITE LEG		2008	.00	.17	.26	.32	.36	.49	.54	.56	.59	.67
9		STK GRIP		3001	.00	.00	.00	.00	.00	.06	.06	.06	.12	.12
10		STK SEAS		3002	.00	.00	.00	.00	.00	.00	.04	.15	.15	.19
11		STK YOKE		3003	.00	.00	.00	.00	.00	.06	.06	.12	.12	.12
12		LFT STAR		3137	.00	.00	.00	.00	.00	.02	.10	.12	.13	.16
13		RHT STAR		3237	.00	.00	.00	.00	.00	.02	.10	.12	.15	.20
14		M1 FLUID		3503	.00	.00	.13	.13	.17	.31	.37	.42	.42	.44
15		M1 MANIF		3504	.00	.00	.00	.00	.00	.21	.29	.31	.31	.31
16		M1 FILTER		3505	.00	.04	.23	.23	.23	.31	.38	.44	.44	.52
17		M1 COOLR		3506	.00	.00	.00	.00	.00	.04	.04	.04	.04	.04
18		M1 PUMP		3511	.00	.00	.00	.00	.01	.06	.11	.11	.15	.15
19		M1 PRESF		3514	.00	.00	.00	.01	.01	.05	.07	.09	.09	.09
20		M1 PRESR		3515	.00	.00	.06	.10	.10	.13	.15	.23	.23	.31
21		M2 FLUID		3603	.00	.00	.17	.17	.22	.37	.38	.44	.44	.44
22		M2 MANIF		3604	.00	.00	.27	.27	.27	.24	.24	.24	.24	.24
23		M2 FILTER		3605	.00	.04	.00	.00	.00	.37	.44	.46	.46	.54
24		M2 COOLR		3606	.00	.00	.00	.00	.00	.04	.04	.04	.04	.04
25		M2 PUMP		3611	.00	.00	.10	.14	.16	.24	.34	.39	.39	.40
26		M2 PRESF		3614	.00	.00	.00	.00	.00	.08	.12	.13	.13	.21
27		M2 PRESR		3615	.00	.00	.00	.00	.00	.06	.08	.08	.08	.08
28		M1 FLUID		3A77	.00	.00	.00	.00	.00	.17	.27	.31	.31	.31
29		FUEL 1-A		4004	.00	.28	.32	.36	.40	.41	.42	.43	.44	.47
30		FUEL 1-B		4005	.00	.06	.20	.24	.27	.30	.31	.34	.36	.43
31		FUEL 1-C		4006	.00	.02	.05	.14	.16	.25	.26	.27	.27	.27
32		FUEL 1-D		4007	.00	.23	.24	.25	.25	.26	.26	.27	.27	.29
33		FUEL 1-E		4008	.00	.23	.31	.35	.35	.55	.55	.56	.56	.59
34		FUEL 2-A		4014	.00	.00	.06	.23	.28	.34	.36	.37	.38	.39
35		FUEL 2-B		4015	.00	.00	.00	.01	.04	.14	.15	.16	.16	.18
36		FUEL 2-C		4016	.00	.00	.06	.07	.07	.15	.17	.17	.17	.20
37		FUEL 2-D		4017	.00	.06	.11	.12	.13	.15	.19	.21	.21	.21
38		FUEL 2-E		4018	.00	.12	.22	.25	.45	.47	.48	.48	.48	.50
39		FUEL 3-A		4024	.00	.00	.00	.09	.13	.21	.24	.25	.27	.36
40		FUEL 3-B		4025	.00	.00	.00	.04	.04	.11	.12	.12	.12	.17
41		FUEL 3-C		4026	.00	.00	.02	.03	.04	.07	.10	.11	.11	.13
42		FUEL 3-D		4027	.00	.03	.04	.06	.07	.09	.11	.14	.14	.21
43		FUEL 3-E		4028	.00	.15	.21	.22	.39	.43	.46	.46	.46	.49
44		FUEL 4-A		4034	.00	.00	.03	.06	.15	.21	.24	.25	.26	.29
45		FUEL 4-B		4035	.00	.01	.03	.06	.08	.12	.14	.15	.15	.20
46		FUEL 4-C		4036	.00	.00	.00	.10	.11	.14	.15	.17	.18	.21
47		FUEL 4-D		4037	.00	.04	.14	.16	.19	.21	.23	.25	.26	.30
48		FUEL 4-E		4038	.00	.32	.34	.36	.43	.49	.50	.51	.53	.56
49		LFT FLIN		4215	.00	.04	.06	.06	.06	.10	.13	.13	.13	.17
50		RHT FLIA		4216	.00	.04	.06	.06	.06	.10	.13	.13	.13	.21
51		LFT FUEL		4221	.00	.06	.15	.17	.21	.24	.33	.33	.41	.42
52		RHT FUEL		4222	.00	.07	.13	.15	.17	.24	.25	.33	.41	.42
53		VENT TNR		4602	.00	.01	.10	.12	.17	.33	.37	.37	.39	.44
54		OXYGEN		9402	.00	.00	.00	.02	.11	.59	.67	.67	.74	.74
55		WT EXCHG		9417	.00	.00	.00	.00	.00	.00	.14	.14	.14	.24
56		BLO LINE		9431	.00	.00	.00	.01	.04	.04	.07	.07	.07	.10

57	PHI CMRG	5432	1	.00	.00	.00	.00	.04	.04	.15	.23
58	LFT CMRG	9933	1	.00	.00	.00	.00	.00	.00	.04	.04
59	RMT CMRG	9934	1	.00	.00	.00	.00	.00	.00	.04	.04
60	CAMTR 1	9935	1	.00	.00	.00	.00	.00	.00	.00	.00
61	CAMTR 2	9936	1	.00	.00	.00	.00	.00	.00	.00	.00
62	GUN CART	9937	1	.00	.00	.00	.00	.04	.04	.04	.00
63	REM WKT	9938	1	.00	.00	.00	.00	.04	.04	.04	.00
64	SEAT RMT	9939	1	.00	.00	.00	.00	.00	.00	.04	.12
65	LFT CRMT	9940	1	.00	.00	.00	.00	.01	.04	.10	.16
66	RMT CRMT	9941	1	.00	.00	.00	.00	.12	.12	.12	.12

Figure A-4. VAMERGE Output for ASALT Data Deck

These ten pages (A-106 through A-115) are a copy of the output written on Logical Unit #4 by executing Program VAMERGE. It represents the computer generated portion of the ASALT Data Deck which requires a few manual modifications before it can be used as input for the ASALT Program.

[illegible]

A-107

[illegible]

[illegible]



[illegible]

FUEL 2-1-1	118+00	122+00	126+00	130+00	134+00	138+00	142+00	146+00	150+00	154+00	158+00	162+00	166+00	170+00	174+00	178+00	182+00	186+00	190+00	194+00	198+00	202+00	206+00	210+00	214+00	218+00	222+00	226+00	230+00	234+00	238+00	242+00	246+00	250+00	254+00	258+00	262+00	266+00	270+00	274+00	278+00	282+00	286+00	290+00	294+00	298+00	302+00	306+00	310+00	314+00	318+00	322+00	326+00	330+00	334+00	338+00	342+00	346+00	350+00	354+00	358+00	362+00	366+00	370+00	374+00	378+00	382+00	386+00	390+00	394+00	398+00	402+00	406+00	410+00	414+00	418+00	422+00	426+00	430+00	434+00	438+00	442+00	446+00	450+00	454+00	458+00	462+00	466+00	470+00	474+00	478+00	482+00	486+00	490+00	494+00	498+00	502+00	506+00	510+00	514+00	518+00	522+00	526+00	530+00	534+00	538+00	542+00	546+00	550+00	554+00	558+00	562+00	566+00	570+00	574+00	578+00	582+00	586+00	590+00	594+00	598+00	602+00	606+00	610+00	614+00	618+00	622+00	626+00	630+00	634+00	638+00	642+00	646+00	650+00	654+00	658+00	662+00	666+00	670+00	674+00	678+00	682+00	686+00	690+00	694+00	698+00	702+00	706+00	710+00	714+00	718+00	722+00	726+00	730+00	734+00	738+00	742+00	746+00	750+00	754+00	758+00	762+00	766+00	770+00	774+00	778+00	782+00	786+00	790+00	794+00	798+00	802+00	806+00	810+00	814+00	818+00	822+00	826+00	830+00	834+00	838+00	842+00	846+00	850+00	854+00	858+00	862+00	866+00	870+00	874+00	878+00	882+00	886+00	890+00	894+00	898+00	902+00	906+00	910+00	914+00	918+00	922+00	926+00	930+00	934+00	938+00	942+00	946+00	950+00	954+00	958+00	962+00	966+00	970+00	974+00	978+00	982+00	986+00	990+00	994+00	998+00	1002+00	1006+00	1010+00	1014+00	1018+00	1022+00	1026+00	1030+00	1034+00	1038+00	1042+00	1046+00	1050+00	1054+00	1058+00	1062+00	1066+00	1070+00	1074+00	1078+00	1082+00	1086+00	1090+00	1094+00	1098+00	1102+00	1106+00	1110+00	1114+00	1118+00	1122+00	1126+00	1130+00	1134+00	1138+00	1142+00	1146+00	1150+00	1154+00	1158+00	1162+00	1166+00	1170+00	1174+00	1178+00	1182+00	1186+00	1190+00	1194+00	1198+00	1202+00	1206+00	1210+00	1214+00	1218+00	1222+00	1226+00	1230+00	1234+00	1238+00	1242+00	1246+00	1250+00	1254+00	1258+00	1262+00	1266+00	1270+00	1274+00	1278+00	1282+00	1286+00	1290+00	1294+00	1298+00	1302+00	1306+00	1310+00	1314+00	1318+00	1322+00	1326+00	1330+00	1334+00	1338+00	1342+00	1346+00	1350+00	1354+00	1358+00	1362+00	1366+00	1370+00	1374+00	1378+00	1382+00	1386+00	1390+00	1394+00	1398+00	1402+00	1406+00	1410+00	1414+00	1418+00	1422+00	1426+00	1430+00	1434+00	1438+00	1442+00	1446+00	1450+00	1454+00	1458+00	1462+00	1466+00	1470+00	1474+00	1478+00	1482+00	1486+00	1490+00	1494+00	1498+00	1502+00	1506+00	1510+00	1514+00	1518+00	1522+00	1526+00	1530+00	1534+00	1538+00	1542+00	1546+00	1550+00	1554+00	1558+00	1562+00	1566+00	1570+00	1574+00	1578+00	1582+00	1586+00	1590+00	1594+00	1598+00	1602+00	1606+00	1610+00	1614+00	1618+00	1622+00	1626+00	1630+00	1634+00	1638+00	1642+00	1646+00	1650+00	1654+00	1658+00	1662+00	1666+00	1670+00	1674+00	1678+00	1682+00	1686+00	1690+00	1694+00	1698+00	1702+00	1706+00	1710+00	1714+00	1718+00	1722+00	1726+00	1730+00	1734+00	1738+00	1742+00	1746+00	1750+00	1754+00	1758+00	1762+00	1766+00	1770+00	1774+00	1778+00	1782+00	1786+00	1790+00	1794+00	1798+00	1802+00	1806+00	1810+00	1814+00	1818+00	1822+00	1826+00	1830+00	1834+00	1838+00	1842+00	1846+00	1850+00	1854+00	1858+00	1862+00	1866+00	1870+00	1874+00	1878+00	1882+00	1886+00	1890+00	1894+00	1898+00	1902+00	1906+00	1910+00	1914+00	1918+00	1922+00	1926+00	1930+00	1934+00	1938+00	1942+00	1946+00	1950+00	1954+00	1958+00	1962+00	1966+00	1970+00	1974+00	1978+00	1982+00	1986+00	1990+00	1994+00	1998+00	2002+00	2006+00	2010+00	2014+00	2018+00	2022+00	2026+00	2030+00	2034+00	2038+00	2042+00	2046+00	2050+00	2054+00	2058+00	2062+00	2066+00	2070+00	2074+00	2078+00	2082+00	2086+00	2090+00	2094+00	2098+00	2102+00	2106+00	2110+00	2114+00	2118+00	2122+00	2126+00	2130+00	2134+00	2138+00	2142+00	2146+00	2150+00	2154+00	2158+00	2162+00	2166+00	2170+00	2174+00	2178+00	2182+00	2186+00	2190+00	2194+00	2198+00	2202+00	2206+00	2210+00	2214+00	2218+00	2222+00	2226+00	2230+00	2234+00	2238+00	2242+00	2246+00	2250+00	2254+00	2258+00	2262+00	2266+00	2270+00	2274+00	2278+00	2282+00	2286+00	2290+00	2294+00	2298+00	2302+00	2306+00	2310+00	2314+00	2318+00	2322+00	2326+00	2330+00	2334+00	2338+00	2342+00	2346+00	2350+00	2354+00	2358+00	2362+00	2366+00	2370+00	2374+00	2378+00	2382+00	2386+00	2390+00	2394+00	2398+00	2402+00	2406+00	2410+00	2414+00	2418+00	2422+00	2426+00	2430+00	2434+00	2438+00	2442+00	2446+00	2450+00	2454+00	2458+00	2462+00	2466+00	2470+00	2474+00	2478+00	2482+00	2486+00	2490+00	2494+00	2498+00	2502+00	2506+00	2510+00	2514+00	2518+00	2522+00	2526+00	2530+00	2534+00	2538+00	2542+00	2546+00	2550+00	2554+00	2558+00	2562+00	2566+00	2570+00	2574+00	2578+00	2582+00	2586+00	2590+00	2594+00	2598+00	2602+00	2606+00	2610+00	2614+00	2618+00	2622+00	2626+00	2630+00	2634+00	2638+00	2642+00	2646+00	2650+00	2654+00	2658+00	2662+00	2666+00	2670+00	2674+00	2678+00	2682+00	2686+00	2690+00	2694+00	2698+00	2702+00	2706+00	2710+00	2714+00	2718+00	2722+00	2726+00	2730+00	2734+00	2738+00	2742+00	2746+00	2750+00	2754+00	2758+00	2762+00	2766+00	2770+00	2774+00	2778+00	2782+00	2786+00	2790+00	2794+00	2798+00	2802+00	2806+00	2810+00	2814+00	2818+00	2822+00	2826+00	2830+00	2834+00	2838+00	2842+00	2846+00	2850+00	2854+00	2858+00	2862+00	2866+00	2870+00	2874+00	2878+00	2882+00	2886+00	2890+00	2894+00	2898+00	2902+00	2906+00	2910+00	2914+00	2918+00	2922+00	2926+00	2930+00	2934+00	2938+00	2942+00	2946+00	2950+00	2954+00	2958+00	2962+00	2966+00	2970+00	2974+00	2978+00	2982+00	2986+00	2990+00	2994+00	2998+00	3002+00	3006+00	3010+00	3014+00	3018+00	3022+00	3026+00	3030+00	3034+00	3038+00	3042+00	3046+00	3050+00	3054+00	3058+00	3062+00	3066+00	3070+00	3074+00	3078+00	3082+00	3086+00	3090+00	3094+00	3098+00	3102+00	3106+00	3110+00	3114+00	3118+00	3122+00	3126+00	3130+00	3134+00	3138+00	3142+00	3146+00	3150+00	3154+00	3158+00	3162+00	3166+00	3170+00	3174+00	3178+00	3182+00	3186+00	3190+00	3194+00	3198+00	3202+00	3206+00	3210+00	3214+00	3218+00	3222+00	3226+00	3230+00	3234+00	3238+00	3242+00	3246+00	3250+00	3254+00	3258+00	3262+00	3266+00	3270+00	3274+00	3278+00	3282+00	3286+00	3290+00	3294+00	3298+00	3302+00	3306+00	3310+00	3314+00	3318+00	3322+00	3326+00	3330+00	3334+00	3338+00	3342+00	3346+00	3350+00	3354+00	3358+00	3362+00	3366+00	3370+00	3374+00	3378+00	3382+00	3386+00	3390+00	3394+00	3398+00	3402+00	3406+00	3410+00	3414+00	3418+00	3422+00	3426+00	3430+00	3434+00	3438+00	3442+00	3446+00	3450+00	3454+00	3458+00	3462+00	3466+00	3470+00	3474+00	3478+00	3482+00	3486+00	3490+00	3494+00	3498+00	3502+00	3506+00	3510+00	3514+00	3518+00	3522+00	3526+00	3530+00	3534+00	3538+00	3542+00	3546+00	3550+00	3554+00	3558+00	3562+00	3566+00	3570+00	3574+00	3578+00	3582+00	3586+00	3590+00	3594+00	3598+00	3602+00	3606+00	3610+00	3614+00	3618+00	3622+00	3626+00	3630+00	3634+00	3638+00	3642+00	3646+00	3650+00	3654+00	3658+00	3662+00	3666+00	3670+00	3674+00	3678+00	3682+00	3686+00	3690+00	3694+00	3698+00	3702+00	3706+00	3710+00	3714+00	3718+00	3722+00	3726+00	3730+00	3734+00	3738+00	3742+00	3746+00	3750+00	3754+00	3758+00	3762+00	3766+00	3770+00	3774+00	3778+00	3782+00	3786+00	3790+00	3794+00	3798+00	3802+00	3806+00	3810+00	3814+00	3818+00	3822+00	3826+00	3830+00	3834+00	3838+00	3842+00	3846+00	3850+00	3854+00	3858+00	3862+00	3866+00	3870+00	3874+00	3878+00	3882+00	3886+00	3890+00	3894+00	3898+00	3902+00	3906+00	3910+00	3914+00	3918+00	3922+00	3926+00	3930+00	3934+00	3938+00	3942+00	3946+00	3950+00	3954+00	3958+00	3962+00	3966+00	3970+00	3974+00	3978+00	3982+00	3986+00	3990+00	3994+00	3998+00	4002+00	4006+00	4010+00	4014+00	4018+00	4022+00	4026+00	4030+00	4034+00	4038+00	4042+00	4046+00	4050+00	4054+00	4058+00	4062+00	4066+00	4070+00	4074+00	4078+00	4082+00	4086+00	4090+00	4094+00	4098+00	4102+00	4106+00	4110+00	4114+00	4118+00	4122+00	4126+00	4130+00	4134+00	4138+00	4142+00	4146+00	4150+00	4154+00	4158+00	4162+00	4166+00	4170+00	4174+00	4178+00	4182+00	4186+00	4190+00	4194+00	4198+00	4202+00	4206+00	4210+00	4214+00	4218+00	4222+00	4226+00	4230+00	4234+00	4238+00	4242+00	4246+00	4250+00	4254+00	4258+00	4262+00	4266+00	4270+00	4274+00	4278+00	4282+00	4286+00	4290+00	4294+00	4298+00	4302+00	4306+00	4310+00
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JTCG/AS-81-S-005

ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED

A-115

Figure A-5. Final ASALT Data Deck for Benchmark

These ten pages (A-117 through A-126) are a copy of the final ASALT Data Deck used for the benchmark run. Most of the data is the output from Program VAMERGE, but the pages also include several additional items required as input for the ASALT Program.

[illegible]



1251	1252	1253	1254	1255	1256	1257	1258	1259	1260	1261	1262	1263	1264	1265	1266	1267	1268	1269	1270
1271	1272	1273	1274	1275	1276	1277	1278	1279	1280	1281	1282	1283	1284	1285	1286	1287	1288	1289	1290
1291	1292	1293	1294	1295	1296	1297	1298	1299	1300	1301	1302	1303	1304	1305	1306	1307	1308	1309	1310
1311	1312	1313	1314	1315	1316	1317	1318	1319	1320	1321	1322	1323	1324	1325	1326	1327	1328	1329	1330
1331	1332	1333	1334	1335	1336	1337	1338	1339	1340	1341	1342	1343	1344	1345	1346	1347	1348	1349	1350
1351	1352	1353	1354	1355	1356	1357	1358	1359	1360	1361	1362	1363	1364	1365	1366	1367	1368	1369	1370
1371	1372	1373	1374	1375	1376	1377	1378	1379	1380	1381	1382	1383	1384	1385	1386	1387	1388	1389	1390
1391	1392	1393	1394	1395	1396	1397	1398	1399	1400	1401	1402	1403	1404	1405	1406	1407	1408	1409	1410
1411	1412	1413	1414	1415	1416	1417	1418	1419	1420	1421	1422	1423	1424	1425	1426	1427	1428	1429	1430
1431	1432	1433	1434	1435	1436	1437	1438	1439	1440	1441	1442	1443	1444	1445	1446	1447	1448	1449	1450
1451	1452	1453	1454	1455	1456	1457	1458	1459	1460	1461	1462	1463	1464	1465	1466	1467	1468	1469	1470
1471	1472	1473	1474	1475	1476	1477	1478	1479	1480	1481	1482	1483	1484	1485	1486	1487	1488	1489	1490
1491	1492	1493	1494	1495	1496	1497	1498	1499	1500	1501	1502	1503	1504	1505	1506	1507	1508	1509	1510
1511	1512	1513	1514	1515	1516	1517	1518	1519	1520	1521	1522	1523	1524	1525	1526	1527	1528	1529	1530
1531	1532	1533	1534	1535	1536	1537	1538	1539	1540	1541	1542	1543	1544	1545	1546	1547	1548	1549	1550
1551	1552	1553	1554	1555	1556	1557	1558	1559	1560	1561	1562	1563	1564	1565	1566	1567	1568	1569	1570
1571	1572	1573	1574	1575	1576	1577	1578	1579	1580	1581	1582	1583	1584	1585	1586	1587	1588	1589	1590
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1611	1612	1613	1614	1615	1616	1617	1618	1619	1620	1621	1622	1623	1624	1625	1626	1627	1628	1629	1630
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1671	1672	1673	1674	1675	1676	1677	1678	1679	1680	1681	1682	1683	1684	1685	1686	1687	1688	1689	1690
1691	1692	1693	1694	1695	1696	1697	1698	1699	1700	1701	1702	1703	1704	1705	1706	1707	1708	1709	1710
1711	1712	1713	1714	1715	1716	1717	1718	1719	1720	1721	1722	1723	1724	1725	1726	1727	1728	1729	1730
1731	1732	1733	1734	1735	1736	1737	1738	1739	1740	1741	1742	1743	1744	1745	1746	1747	1748	1749	1750
1751	1752	1753	1754	1755	1756	1757	1758	1759	1760	1761	1762	1763	1764	1765	1766	1767	1768	1769	1770
1771	1772	1773	1774	1775	1776	1777	1778	1779	1780	1781	1782	1783	1784	1785	1786	1787	1788	1789	1790
1791	1792	1793	1794	1795	1796	1797	1798	1799	1800	1801	1802	1803	1804	1805	1806	1807	1808	1809	1810
1811	1812	1813	1814	1815	1816	1817	1818	1819	1820	1821	1822	1823	1824	1825	1826	1827	1828	1829	1830
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1851	1852	1853	1854	1855	1856	1857	1858	1859	1860	1861	1862	1863	1864	1865	1866	1867	1868	1869	1870
1871	1872	1873	1874	1875	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890
1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910
1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010

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0000	0	3.5	1.00	0.0	350.	30.	100.
-10.	1.	2.2	1.00	0.	360.	0.	100.
-10.	1.0	2.2	1.00	0.	360.	0.	100.
-10.	0.0	3.1	1.00	0.	360.	0.	100.
-10.	0.0	3.	1.00	0.	360.	0.	100.
-11.	0.7	2.9	1.00	0.	360.	0.	100.
-13.	0.0	2.0	1.00	0.	350.	0.	100.

KILL CATEGORY 1

\*GR-MILL = MILIT. CR. CONTROLS. CR. FUEL. CR. MISC

\*SPILCT = HEAD. CR. THORAX. CR. ABDOMEN. CR. PELVIS. CR. ARMS. CR. LEGS

\*SARPS = LEFT ARM. AND. RITE ARM/2/2

\*SLEGS = LEFT LEG. AND. RITE LEG/2/2

\*SCORTRULSE = STICK. CR. STABILAT. CR. HYDRAULIC

\*SSTICK = STK GRIP. AND. STK SENS. AND. STK YONE/2/3

\*SSTABILATE = LFT STAB. AND. RHT STAB/2/2

\*SMYDRAULIC = HYD1. CR. HYD2. CR. HY FLUID

\*SMYD1 = M1 FLUID. AND. M1 PUMP. AND. M1 PRESF. AND. M1 PRESK/2/4

\*SMYD2 = M2 FLUID. AND. M2 PUMP. AND. M2 PRESF. AND. M2 PRESK/2/4

\*SPUEL = TANK1. CR. TANK2. CR. TANK3. CR. TANK4. CR. LINES. CR. VENT TAN

\*STANK1 = FUEL 1-A. CR. FUEL 1-B. CR. FUEL 1-C. CR. FUEL 1-D. CR. FUEL 1-E

\*STANK2 = FUEL 2-A. CR. FUEL 2-B. CR. FUEL 2-C. CR. FUEL 2-D. CR. FUEL 2-E

\*STANK3 = FUEL 3-A. CR. FUEL 3-B. CR. FUEL 3-C. CR. FUEL 3-D. CR. FUEL 3-E

\*STANK4 = FUEL 4-A. CR. FUEL 4-B. CR. FUEL 4-C. CR. FUEL 4-D. CR. FUEL 4-E

\*SLINES = LFT FUEL. CR. RHT FUEL

\*SNISC = OXYGEN. CR. PYROTECH

\*SPYROTECH = FRT CMRG. CR. LFT CMRG. CR. RHT CMRG. CR. LFT CMRT. CR. RHT CMRT

\*SRESTPRG = GUN CART. CR. REM MKT. CR. SEAT MAT. CR. LFT CRKT. CR. RHT CRKT

END

END OF KILL GROUP

KILL CATEGORY 2

\*GM ARMT = PILOT. CR. CONTROLS. CR. FUEL. CR. MISC

\*SPILCT = HEAD. CR. THORAX. CR. ABDOMEN. CR. PELVIS. CR. ARMS. CR. LEGS

\*SARPS = LEFT ARM. AND. RITE ARM

\*SLEGS = LEFT LEG. AND. RITE LEG

\*SCORTRULSE = STICK. CR. STABILAT. CR. HYDRAULIC

\*SSTICK = STK GRIP. CR. STK SENS. CR. STK YONE

\*SSTABILATE = LFT STAB. CR. RHT STAB

\*SMYDRAULIC = HYD1. CR. HYD2. CR. HY FLUID

\*SMYD1 = M1 FLUID. CR. M1 MANIF. CR. M1 FILTR. CR. M1 COOLR. CR. M1 MEST

\*SMYD2 = M2 FLUID. CR. M2 MANIF. CR. M2 FILTR. CR. M2 COOLR. CR. M2 MEST

\*SPUEL = TANK1. CR. TANK2. CR. TANK3. CR. TANK4. CR. LINES. CR. VENT TAN

\*STANK1 = FUEL 1-A. CR. FUEL 1-B. CR. FUEL 1-C. CR. FUEL 1-D. CR. FUEL 1-E

\*STANK2 = FUEL 2-A. CR. FUEL 2-B. CR. FUEL 2-C. CR. FUEL 2-D. CR. FUEL 2-E

\*STANK3 = FUEL 3-A. CR. FUEL 3-B. CR. FUEL 3-C. CR. FUEL 3-D. CR. FUEL 3-E

\*STANK4 = FUEL 4-A. CR. FUEL 4-B. CR. FUEL 4-C. CR. FUEL 4-D. CR. FUEL 4-E

\*SLINES = LFT FLIN. CR. LFT FUEL. CR. RHT FLIN. CR. RHT FUEL

\*SNISC = OXYGEN. CR. PYROTECH

\*SPYROTECH = FRT CMRG. CR. LFT CMRG. CR. RHT CMRG. CR. LFT CRKT. CR. RHT CRKT

\*SRESTPRG = GUN CART. CR. REM MKT. CR. SEAT MAT. CR. LFT CRKT. CR. RHT CRKT

END

END OF KILL GROUP

Figure A-6. Line Printer Output for ASALT Benchmark

These 20 pages (A-128 through A-147) are a copy of the line printer output generated during execution of Program ASALT using the input data assembled for the benchmark run.



26	FT FUEL 1	-13.00	.04	2.10	PK =	.00	.00	.00	.17	.27	.31	.31
29	FUEL 1-A	-9.00	.04	2.70	PK =	.00	.24	.32	.41	.43	.44	.47
30	FUEL 1-B	-6.00	.04	3.00	PK =	.00	.06	.20	.30	.34	.34	.43
31	FUEL 1-C	-6.00	.04	3.10	PK =	.00	.02	.05	.14	.27	.27	.27
32	FUEL 1-D	-6.00	.04	3.30	PK =	.00	.23	.24	.26	.27	.27	.29
33	FUEL 1-E	-6.00	.04	3.50	PK =	.00	.23	.31	.55	.55	.56	.59
34	FUEL 2-A	-10.00	.04	2.50	PK =	.00	.00	.04	.34	.37	.38	.34
35	FUEL 2-B	-10.00	.04	2.70	PK =	.00	.00	.01	.14	.16	.16	.18
36	FUEL 2-C	-10.00	.04	3.00	PK =	.00	.06	.06	.15	.17	.17	.20
37	FUEL 2-D	-10.00	.04	3.20	PK =	.00	.06	.11	.13	.19	.21	.21
38	FUEL 2-E	-10.00	.04	3.50	PK =	.00	.12	.22	.45	.48	.48	.50
39	FUEL 3-A	-11.00	.04	2.40	PK =	.00	.00	.09	.21	.25	.27	.36
40	FUEL 3-B	-11.00	.04	2.70	PK =	.00	.00	.02	.07	.12	.12	.17
41	FUEL 3-C	-11.00	.05	2.90	PK =	.00	.00	.03	.11	.11	.13	.17
42	FUEL 3-D	-11.00	.04	3.10	PK =	.00	.03	.06	.09	.14	.14	.21
43	FUEL 3-E	-11.00	.06	3.40	PK =	.00	.15	.21	.43	.45	.46	.49
44	FUEL 4-A	-13.00	.04	2.50	PK =	.00	.00	.03	.15	.25	.26	.29
45	FUEL 4-B	-13.00	.04	2.80	PK =	.00	.01	.06	.12	.14	.15	.20
46	FUEL 4-C	-13.00	.04	3.00	PK =	.00	.00	.06	.11	.17	.18	.21
47	FUEL 4-D	-13.00	.04	3.10	PK =	.00	.05	.14	.21	.23	.26	.30
48	FUEL 4-E	-13.00	.04	3.30	PK =	.00	.32	.34	.49	.51	.53	.56
49	LFT FLIN	-12.00	.08	2.80	PK =	.00	.04	.06	.10	.13	.13	.17
50	RMT FLIN	-12.00	.08	2.80	PK =	.00	.04	.06	.10	.13	.13	.17
51	LFT FUEL	-14.00	.62	2.20	PK =	.00	.04	.13	.21	.33	.41	.42
52	RMT FUEL	-14.00	.62	2.20	PK =	.00	.04	.13	.21	.33	.41	.42
53	VENT TNP	-14.00	.08	2.80	PK =	.00	.01	.10	.17	.25	.28	.30
54	XYGN	-7.60	.30	2.70	PK =	.00	.00	.02	.33	.37	.39	.44
55	MT EXCHG	-11.00	.32	2.50	PK =	.00	.00	.00	.42	.64	.67	.74
56	ALO LINE	-11.00	.32	3.10	PK =	.00	.00	.00	.00	.14	.24	.46
57	RMT CHRG	-7.00	.08	3.70	PK =	.00	.00	.01	.06	.07	.07	.10
58	LFT CHRG	-6.70	.05	3.10	PK =	.00	.00	.00	.04	.08	.15	.23
59	RMT CHRG	-6.70	.05	3.10	PK =	.00	.00	.00	.04	.08	.15	.23
60	CARTN 1	-6.90	.00	3.40	PK =	.00	.00	.00	.00	.00	.04	.04
61	CARTN 2	-6.80	.00	3.10	PK =	.00	.00	.00	.00	.00	.04	.04
62	GLN CART	-7.00	.06	3.70	PK =	.00	.00	.00	.00	.00	.00	.00
63	REM HAT	-6.90	.07	3.40	PK =	.00	.00	.00	.04	.08	.08	.12
64	SPAT HAT	-6.50	.04	2.70	PK =	.00	.00	.00	.04	.08	.10	.16
65	LFT CMKT	-7.20	.43	3.40	PK =	.00	.00	.00	.12	.12	.12	.12
66	RMT CMKT	-7.20	.43	3.40	PK =	.00	.00	.00	.12	.12	.12	.12

AIM POINTS ON AIRCRAFT:	LOCATION IN AIRCRAFT C.S.	SIGMA-Y (MILS)	SIGMA-Z (MILS)	LOOK-ANGLE ENVELOPE TO HIT THE AIR POINT	ELEVATION IN DEG.
1	-6.50	.00	.00	0 TO 360.0	30.0 TO 180.0
2	-14.00	1.00	.00	0 TO 360.0	0 TO 180.0
3	-14.00	-1.00	.00	0 TO 360.0	0 TO 180.0
4	-6.60	.04	.00	0 TO 360.0	0 TO 180.0
5	-10.00	.04	.00	0 TO 360.0	0 TO 180.0
6	-11.00	.07	.00	0 TO 360.0	0 TO 180.0
7	-13.00	.04	.00	0 TO 360.0	0 TO 180.0

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ALPHA LOCATION			STATUS		TOTAL AIRCRAFT FROM LASER POINT AT EACH AIR POINT						
TIME	X	Y	STATUS	STATUS	1	2	3	4	5	6	7
1.00	-12000.	-924.	4064.	13204.	NOT ENGAGE						
1.00	-11744.	-921.	4097.	13601.	NOT ENGAGE						
2.00	-11494.	-918.	4125.	12604.	NOT ENGAGE						
3.00	-11244.	-916.	4188.	12614.	NOT ENGAGE						
4.00	-10993.	-915.	4200.	12425.	NOT ENGAGE						
5.00	-10740.	-919.	4237.	12237.	NOT ENGAGE						
6.00	-10487.	-915.	4251.	12049.	NOT ENGAGE						
7.00	-10233.	-914.	4267.	11862.	NOT ENGAGE						
8.00	-9980.	-919.	4268.	11677.	NOT ENGAGE						
9.00	-9726.	-914.	4264.	11490.	NOT ENGAGE						
10.00	-9472.	-911.	4256.	11300.	NOT ENGAGE						
11.00	-9219.	-879.	4243.	11106.	NOT ENGAGE						
12.00	-8966.	-849.	4224.	10909.	NOT ENGAGE						
13.00	-8716.	-811.	4201.	10706.	NOT ENGAGE						
14.00	-8470.	-764.	4173.	10505.	NOT ENGAGE						
15.00	-8224.	-709.	4141.	10296.	NOT ENGAGE						
16.00	-7981.	-646.	4103.	10089.	NOT ENGAGE						
17.00	-7741.	-575.	4061.	9877.	NOT ENGAGE						
18.00	-7504.	-497.	4014.	9663.	NOT ENGAGE						
19.00	-7271.	-410.	3962.	9446.	NOT ENGAGE						
20.00	-7041.	-316.	3905.	9227.	NOT ENGAGE						
21.00	-6817.	-215.	3844.	9007.	NOT ENGAGE						
22.00	-6597.	-106.	3779.	8784.	NOT ENGAGE						
23.00	-6381.	9.	3709.	8560.	NOT ENGAGE						
24.00	-6172.	133.	3639.	8334.	NOT ENGAGE						
25.00	-5964.	254.	3564.	8112.	NOT ENGAGE						
26.00	-5741.	359.	3504.	7902.	NOT ENGAGE						
27.00	-5517.	447.	3517.	7707.	NOT ENGAGE						
28.00	-5289.	510.	3504.	7529.	NOT ENGAGE						
29.00	-5055.	571.	3504.	7367.	NOT ENGAGE						
30.00	-4818.	607.	3519.	7225.	NOT ENGAGE						
31.00	-4580.	626.	3547.	7105.	NOT ENGAGE						
32.00	-4340.	627.	3564.	7006.	NOT ENGAGE						
33.00	-4111.	623.	3639.	6925.	NOT ENGAGE						
34.00	-3886.	619.	3694.	6853.	NOT ENGAGE						
35.00	-3670.	616.	3766.	6792.	NOT ENGAGE						
36.00	-3460.	613.	3841.	6740.	NOT ENGAGE						
37.00	-3246.	609.	3912.	6695.	NOT ENGAGE						
38.00	-3034.	604.	3975.	6655.	NOT ENGAGE						
39.00	-2817.	602.	4024.	6620.	NOT ENGAGE						
40.00	-2594.	599.	4072.	6590.	NOT ENGAGE						
41.00	-2378.	596.	4107.	6567.	NOT ENGAGE						
42.00	-2154.	592.	4131.	6549.	NOT ENGAGE						
43.00	-1933.	589.	4147.	6536.	NOT ENGAGE						
44.00	-1710.	585.	4152.	6530.	NOT ENGAGE						
45.00	-1488.	585.	4153.	6526.	NOT ENGAGE						
46.00	-1271.	604.	4151.	6507.	TRACKING						
47.00	-1065.	654.	4143.	6466.	SMOKE						
48.00	-872.	736.	4127.	6404.	SMOKE						
49.00	-649.	837.	4104.	6321.	NOT ENGAGE						
50.00	-534.	962.	4074.	6218.	NOT ENGAGE						
51.00	-394.	1109.	4034.	6091.	NOT ENGAGE						
52.00	-252.	1272.	3967.	5948.	NOT ENGAGE						
53.00	-141.	1457.	3956.	5769.	NOT ENGAGE						
54.00	-124.	1634.	3923.	5415.	NOT ENGAGE						

TIME	ALTIMETER INDICATION	SIGHT RANGE	STATUS	CATEGORY	1	2	3	4	5	6	7
55.00	-92. 1634.	3052.	5430.	NOT ENGAGE	1	.00	.00	.00	.00	.00	.00
56.00	-93. 2031.	3749.	5236.	NOT ENGAGE	2	.01	.01	.01	.01	.01	.01
57.00	-93. 2230.	3745.	5059.	NOT ENGAGE	1	.01	.01	.01	.01	.01	.01
58.00	-95. 2431.	3491.	4841.	TRACKING	2	.01	.01	.01	.02	.02	.01
59.00	-94. 2634.	3435.	4635.	SPARE	1	.03	.02	.03	.03	.03	.03
60.00	-67. 2452.	3577.	4420.	SPARE	2	.04	.03	.04	.04	.04	.04
61.00	-86. 3072.	3519.	4212.	ENGAGE	1	.05	.05	.05	.05	.05	.05
62.00	-89. 3303.	3441.	3992.	ENGAGE	2	.05	.05	.05	.05	.05	.05
63.00	-90. 3542.	3470.	3771.	ENGAGE	1	.07	.06	.07	.07	.07	.07
64.00	-90. 3784.	3490.	3552.	ENGAGE	2	.07	.07	.07	.07	.07	.07
65.00	-90. 4026.	3541.	3344.	ENGAGE	1	.08	.07	.08	.08	.08	.08
66.00	-90. 4266.	3610.	3146.	ENGAGE	2	.09	.08	.09	.09	.09	.09
67.00	-90. 4513.	3672.	2944.	ENGAGE	1	.10	.09	.10	.10	.10	.10
68.00	-90. 4767.	3726.	2752.	ENGAGE	2	.10	.09	.10	.10	.10	.10
69.00	-90. 5024.	3771.	2559.	ENGAGE	1	.12	.10	.12	.12	.12	.12
70.00	-89. 5297.	3806.	2371.	ENGAGE	2	.13	.11	.13	.13	.13	.13
71.00	-89. 5574.	3836.	2192.	ENGAGE	1	.13	.11	.13	.13	.13	.13
2.00	-89. 5857.	3855.	2026.	ENGAGE	2	.14	.13	.14	.14	.14	.14
73.00	-89. 6144.	3864.	1864.	ENGAGE	1	.15	.13	.15	.15	.15	.15
74.00	-89. 6446.	3863.	1769.	ENGAGE	2	.17	.15	.17	.17	.17	.17
75.00	-89. 6752.	3852.	1692.	ENGAGE	1	.18	.16	.18	.18	.18	.18
76.00	-88. 7064.	3832.	1664.	ENGAGE	2	.20	.16	.20	.20	.20	.20
77.00	-92. 7393.	3809.	1692.	ENGAGE	1	.22	.19	.22	.22	.22	.22
78.00	-110. 7708.	3800.	1776.	ENGAGE	2	.24	.21	.24	.24	.24	.24
79.00	-144. 8036.	3607.	1909.	ENGAGE	1	.25	.22	.25	.25	.25	.25
80.00	-193. 8366.	3630.	2004.	ENGAGE	2	.27	.25	.27	.27	.27	.27
81.00	-259. 8694.	3669.	2292.	ENGAGE	1	.29	.26	.29	.29	.29	.29
82.00	-339. 9020.	3923.	2524.	ENGAGE	2	.30	.26	.30	.30	.30	.30
83.00	-435. 9341.	3993.	2774.	ENGAGE	1	.33	.30	.33	.33	.33	.33
84.00	-546. 9656.	4078.	3036.	ENGAGE	2	.33	.30	.33	.33	.33	.33
85.00	-671. 9962.	4176.	3311.	ENGAGE	1	.36	.33	.36	.36	.36	.36

TIME	WINGMAN CATEGORY	SLUG	STATUS	ALL CATEGORY	TOTAL WINGMAN FOR PAGE	4	5	6	7
1	2	3	4	5	6	7	8	9	10
86.00	-610	4290	3590	ENGAGE	2	.52	.52	.49	.66
87.00	-641	4421	3571	ENGAGE	1	.44	.52	.49	.66
88.00	-1126	4583	4154	ENGAGE	2	.53	.53	.50	.67
89.00	-1302	4719	4437	NOT ENGAGE	1	.49	.52	.50	.66
90.00	-1464	4886	4717	NOT ENGAGE	1	.44	.52	.49	.66
91.00	-1685	5065	4993	NOT ENGAGE	2	.53	.53	.50	.67
92.00	-1690	5254	5264	NOT ENGAGE	1	.49	.53	.50	.66
93.00	-2103	5452	5524	NOT ENGAGE	2	.54	.53	.51	.69
94.00	-2322	5647	5766	NOT ENGAGE	1	.49	.53	.50	.66
95.00	-2546	5872	6034	NOT ENGAGE	2	.54	.53	.51	.69
96.00	-2773	6091	6272	NOT ENGAGE	1	.49	.53	.50	.66
97.00	-3002	6314	6500	NOT ENGAGE	2	.54	.53	.51	.69
98.00	-3232	6539	6715	NOT ENGAGE	1	.49	.53	.50	.66
99.00	-3459	6765	6918	NOT ENGAGE	2	.54	.53	.51	.69
100.00	-3683	6991	7106	NOT ENGAGE	1	.49	.53	.50	.66
101.00	-3906	7226	7306	NOT ENGAGE	2	.54	.53	.51	.69
102.00	-4119	7443	7499	NOT ENGAGE	1	.49	.53	.50	.66
103.00	-4341	7654	7702	NOT ENGAGE	2	.54	.53	.51	.69
104.00	-4567	7864	7910	NOT ENGAGE	1	.49	.53	.50	.66
105.00	-4795	8071	8121	NOT ENGAGE	2	.54	.53	.51	.69
106.00	-5027	8280	8334	NOT ENGAGE	1	.49	.53	.50	.66
107.00	-5263	8455	8550	NOT ENGAGE	2	.54	.53	.51	.69
108.00	-5501	8636	8767	NOT ENGAGE	1	.49	.53	.50	.66
109.00	-5744	8810	8986	NOT ENGAGE	2	.54	.53	.51	.69
110.00	-5989	8976	9207	NOT ENGAGE	1	.49	.53	.50	.66

\*\*\* END OF FLIGHT PATH \*\*\*

TOTAL LASER SHOTS = 2

TABLE 1. SUMMARY OF DATA FOR ALL PILOTS

TOTAL AIRCRAFT PIR'S

KILL CATEGORY 1 K-KILL GROUP  
KILL CATEGORY 2 P-ARMED GROUP

SHOOTING PIR'S  
KILL CATEGORY 1 PIR-TECH

KILL CATEGORY 2 PIR-TECH

KILL CATEGORY 3 PIR-TECH

KILL CATEGORY 4 PIR-TECH

KILL CATEGORY 5 PIR-TECH

KILL CATEGORY 6 PIR-TECH

KILL CATEGORY 7 PIR-TECH

KILL CATEGORY 8 PIR-TECH

KILL CATEGORY 9 PIR-TECH

KILL CATEGORY 10 PIR-TECH

KILL CATEGORY 11 PIR-TECH

KILL CATEGORY 12 PIR-TECH

KILL CATEGORY 13 PIR-TECH

KILL CATEGORY 14 PIR-TECH

KILL CATEGORY 15 PIR-TECH

KILL CATEGORY 16 PIR-TECH

KILL CATEGORY 17 PIR-TECH

KILL CATEGORY 18 PIR-TECH

KILL CATEGORY 19 PIR-TECH

KILL CATEGORY 20 PIR-TECH

KILL CATEGORY 21 PIR-TECH

KILL CATEGORY 22 PIR-TECH

KILL CATEGORY 23 PIR-TECH

KILL CATEGORY 24 PIR-TECH

KILL CATEGORY 25 PIR-TECH

KILL CATEGORY 26 PIR-TECH

KILL CATEGORY 27 PIR-TECH

KILL CATEGORY 28 PIR-TECH

KILL CATEGORY 29 PIR-TECH

KILL CATEGORY 30 PIR-TECH

KILL CATEGORY 31 PIR-TECH

KILL CATEGORY 32 PIR-TECH

KILL CATEGORY 33 PIR-TECH

KILL CATEGORY 34 PIR-TECH

KILL CATEGORY 35 PIR-TECH

KILL CATEGORY 36 PIR-TECH

KILL CATEGORY 37 PIR-TECH

KILL CATEGORY 38 PIR-TECH

KILL CATEGORY 39 PIR-TECH

KILL CATEGORY 40 PIR-TECH

KILL CATEGORY 41 PIR-TECH

KILL CATEGORY 42 PIR-TECH

KILL CATEGORY 43 PIR-TECH

KILL CATEGORY 44 PIR-TECH

KILL CATEGORY 45 PIR-TECH

KILL CATEGORY 46 PIR-TECH

KILL CATEGORY 47 PIR-TECH

KILL CATEGORY 48 PIR-TECH

[illegible]

Figure A-7. VAMERGE Source Code

These 11 pages (A-149 through A-159) contain a copy of the source code for program VAMERGE which is the only undocumented program used in the ASALT benchmark sequence.

```

C***
C PROGRAM VAMERGE IS USED TO READ THE VULNERABLE AREA FILES
C CREATED BY GALOOK PROGRAM PEAKAY, AVERAGE THE COMPONENT PA'S,
C AND PRINT THEM IN THE ASALT INPUT FORMAT (LOGICAL UNIT 4) AS
C WELL AS IN READABLE FORM ON THE LINE PRINTER (LOGICAL UNIT, 6)
C
C I/C LOGICAL UNIT TABLE FOR PROGRAM VAMERGE
C FORTRAN LOGICAL UNIT NUMBER
C 1, 2, 3
C
C 4
C 5
C 6
C 7
C 8, 9, 10
C 11 THROUGH 36
C
C DIMENSION FTIM(25), FXCM(25), TIMES(10), ENERGY(10)
C DIMENSION FTIM2(25), FXCM2(25), TIMES2(10)
C DIMENSION ICOMP(100), PAREA(100), COMPAY(100,10)
C DIMENSION CUMP(3,100), AP(100,26), WIDTH(100,26), PK(10,100)
C CHARACTER*8 NAME(100), BLANK
C CHARACTER*4 YORN(2)
C DATA YORN/'NO ', 'YES '/
C DATA AP/2600*1.0/, PK/1000*0.0/
C DATA ENERGY/10*0.0/
C DATA CUMP/300*0.0/
C DATA BLANK/' '
C
C ASALT CARD 1 == TDELT, IPRINT, LIMLIN
C
C WRITE (4,103) 0.5, 2, 60
C
C ASALT CARD 2 == WEAPON LOCATION, AND C.S. REFERENCE
C
C WRITE (4,102) (0.0, 181,9)
C IIN = 11
C READ (5,101) NCRT
C
C READ THE FIRST VULNERABLE AREA FILE FROM LOGICAL UNIT IIN
C
C READ (IIN,END=900) AZ,EL,IFMAX,(FTIN(J),FXCM(J),181,IFMAX),RVHS,

```

```

00001000
00002000
00003000
00004000
00005000
00006000
00007000
00008000
00009000
00010000
00011000
00012000
00013000
00014000
00015000
00016000
00017000
00018000
00019000
00020000
00021000
00022000
00023000
00024000
00025000
00026000
00027000
00028000
00029000
00030000
00031000
00032000
00033000
00034000
00035000
00036000
00037000
00038000
00039000
00040000
00041000
00042000
00043000
00044000
00045000
00046000
00047000
00048000
00049000
00050000
00051000
00052000
00053000
00054000
00055000

```



```

1  IRRMS = RVMS * 1.
   NCCOMP,NTIME,(TIMES(I),I=1,NTIME)
   WRITE (6,111) (I=1(1), AZ, EL, YORN(JEVR), NCCOMP, NCRIT,
*   (FTIM(I), FXCM(I), I=1,IFMAX)
   WRITE (6,112) (TIMES(I), I=1,NTIME)
   WRITE LASER FLUX EMISSION RATES, ASALT CARDS 3, 4, AND 5
   WRITE (4,101) IFMAX, 1
   WRITE (4,102) (FXCM(I), I = 1,IFMAX)
   FTIM(IFMAX) = 1.E+30
   WRITE (4,102) (FTIM(I), I = 1,IFMAX)
   ASALT CARDS 6 AND 7 -- JITTER AND TRACKING
   WRITE (4,102) 1.0, 1.0
   WRITE (4,102) 90., 45., 0.
   ASALT CARDS 8 AND 9 -- ATMOSPHERIC ATTENUATION
   WRITE (4,102) 1.0
   WRITE (4,102) 1.E+30
   ASALT CARD 10 -- NO SMOKE CORRIDOR
   WRITE (4,102)
   ASALT CARD 11 -- NUMBER OF COMPONENTS AND AIM POINTS
   WRITE (4,101) NCRIT, 1
   ASALT CARD 12 -- ENERGY ARGUMENTS, COMPUTE USING FXCM AND
   FTIM ARRAYS FROM ORLOCK FILE
   ENERGY(1) = 0.0
   LIM = NTIME
   IF (NTIME .EQ. 10) LIM = 9
   DO 20 I = 1,LIM
   T1 = 0.0
   FLUX = 0.0
   DO 15 J = 1,IFMAX
   IF (FTIM(J) .GE. TIMES(I)) GO TO 16
   DELT = FTIM(J) - T1
   FLUX = FLUX + (FXCM(J) * DELT)
   T1 = FTIM(J)
15  CONTINUE
   J = IFMAX
16  DELT = TIMES(I) - T1
   FLUX = FLUX + (FXCM(J) * DELT)
   CONVERT FROM JOULES/SQ.CM. TO KILOGJOULES/SQ.CM.
   ENERGY(I+1) = FLUX * 0.001
   CONTINUE
20  LIM = LIM + 1
   WRITE (4,102) (ENERGY(I), I = 1,LIM)

```

```

C***      HEAD COMPONENT NAMES IF PROVIDED, AND CONVERT LOOK-ANGLES TO
C      ASALT INDEX
C***
C      CALL NAMES(NAME, NCRIT, BLANK)
190      CALL ASPTCIND( AZ, EL, ILOOK)
C***
C      READ PRESENTED AND VULNERABLE AREAS FOR EACH CRITICAL COMPONENT
C***
C      DO 200 J = 1, NCRIT
C      READ (IIN, END=900) ICOMP(J), PAREA(J), (COMPVAV(J,K), KE1, NTIME)
C      IF (NAME(J) .EQ. BLANK) WRITE (NAME(J), 195) ICOMP(J)
195      FORMAT (4HCOMP,14)
C      WRITE (6,113) J, NAME(J), ICOMP(J), PAREA(J), (COMPVAV(J,K), KE1, NTIME)
200      CONTINUE
C***
C      USE THE PRESENTED AND VULNERABLE AREAS IN SQ. FEET
C      TO COMPUTE PRESENTED AREA AND WIDTH IN SQ. METERS
C      ASSUME SQUARE PRESENTED AREA
C***
C      DO 240 J = 1, NCRIT
C      AP(J, ILOOK) = PAREA(J) * 0.09290304
C      WIDTH(J, ILOOK) = SQRT( AP(J, ILOOK) )
C      PK(1, J) = 0.0
C      IF (PAREA(J) .LT. 1.E-06) GO TO 240
C***
C      SUM PK'S OVER ALL VIEWS
C***
C      DO 240 I = 2, LIM
C      PK(I, J) = PK(I, J) + COMPVAV(J, I-1) / PAREA(J)
240      CONTINUE
C***
C      HEAD NEXT VULNERABLE AREA FILE FROM LOGICAL UNIT IIN
C***
C      IIN = IIN + 1
C      IF (IIN .GT. 36) GO TO 400
C      READ (IIN, END=900) AZ, EL, IFMAX2, (FTIME2(I), FXCM2(I), I=1, IFMAX2), RVRS,
C      NCCOMP2, NTIME2, (TIMES2(I), I=1, NTIME2)
C      IRVRS = RVRS + 1
C      WRITE (6,111) (IIN=10), AZ, EL, YORN(IRVRS), NCCOMP2, NCRIT,
C      * (FTIME2(I), FTIME2(I), FXCM2(I), I=1, IFMAX2)
C      WRITE (6,112) (TIMES2(I), I=1, NTIME2)
C***
C      TEST TO BE SURE NEW VA FILE IS COMPATIBLE
C***
C      FTIME2(IFMAX2) = 1.E+30
C      IF (IFMAX2 .NE. IFMAX) GO TO 950
C      IF (NCCOMP2 .NE. NCCOMP) GO TO 950
C      IF (NTIME2 .NE. NTIME) GO TO 950
C      DO 300 I = 1, IFMAX
C      IF (FTIME2(I) .NE. FTIME(I) .OR. FXCM2(I) .NE. FXCM(I)) GO TO 950
300      CONTINUE
C      DO 320 I = 1, NTIME
C      IF (TIMES2(I) .NE. TIMES(I)) GO TO 950
320      CONTINUE
C***

```

```

C      ALL TESTS OK, HEAD ITS VULNERABLE AREAS AS DONE FOR PRECEDING FILE(016000)
C*** 00169000
C      GO TO 190
C*** 00170000
C      AVERAGE THE PA'S FROM ALL 26 VIEWS
C*** 00171000
C*** 00172000
C*** 00173000
C      DO 410 J = 2,11M
C*** 00174000
C      DO 410 I = 1,NCRIT
C*** 00175000
C      PK(J,I) = PK(J,I) / 26.0
C*** 00176000
C      410 CONTINUE
C*** 00177000
C      410 CONTINUE
C*** 00178000
C      DETERMINE THE COMPONENT CENTR(10 LOCATIONS
C*** 00179000
C      420 CONTINUE
C*** 00180000
C      CALL GETXYZ(ICOMP, COMP, NCRIT, NAME)
C*** 00181000
C      WRITE (6,121)
C*** 00182000
C      ASALT CARDS 13, 14, AND 15 FOR EACH CRITICAL COMPONENT
C*** 00183000
C      430 CONTINUE
C*** 00184000
C      DO 450 I = 1,NCRIT
C*** 00185000
C      WRITE (4,104) NAME(I), (COMP(J,I), J = 1,3)
C*** 00186000
C      WRITE (4,102) (AP(I,J), WIDTH(I,J), J = 1,26)
C*** 00187000
C      WRITE (4,102) (PK(J,I), J = 1,10)
C*** 00188000
C      WRITE (6,122) I, NAME(I), ICOMP(I), (J,AP(I,J),WIDTH(I,J), J=1,26)
C*** 00189000
C      450 CONTINUE
C*** 00190000
C      450 CONTINUE
C*** 00191000
C      PRINT COMPONENT PK FUNCTIONS ON THE LINE PRINTER TOO
C*** 00192000
C      460 CONTINUE
C*** 00193000
C      WRITE (6,123) (ENERGY(I), I=1,10)
C*** 00194000
C      DO 500 I = 1,NCRIT
C*** 00195000
C      WRITE (6,124) I, NAME(I), ICOMP(I), (PK(J,I), J=1,10)
C*** 00196000
C      500 CONTINUE
C*** 00197000
C      500 CONTINUE
C*** 00198000
C      ALL DONE == FORMAT 125 IS A REMINDER TO FINISH THE ASALT INPUT
C*** 00199000
C      510 CONTINUE
C*** 00200000
C      WRITE (4,125)
C*** 00201000
C      STOP
C*** 00202000
C      FATAL ERRORS DETECTED
C*** 00203000
C      520 CONTINUE
C*** 00204000
C      900 WRITE (6,126) IIN, J
C*** 00205000
C      STOP
C*** 00206000
C      950 WRITE (6,127) IIN
C*** 00207000
C      STOP
C*** 00208000
C      FORMATS
C*** 00209000
C      101 FORMAT (10I6)
C*** 00210000
C      102 FORMAT (10E8.2)
C*** 00211000
C      103 FORMAT (E8.2, 2I8)
C*** 00212000
C      104 FORMAT (A8, 3I8.2)
C*** 00213000
C      111 FORMAT (1PI, 5X, 11MVIEW NUMBER, 13, 9X, AMREVERSED, 9X,
C*** 00214000
C      20NUMBER OF COMPONENTS, 19X, 10MFLUX TABLE /
C*** 00215000
C      2X, 4WAZ = F6.1, 6X EL = F6.1, 8X, A4, 11X, SMTOTAL,
C*** 00216000
C      11M CRITICAL, 13X, 26TIME(SEC,) FLUX(W/SQ.CM.) /
C*** 00217000
C      47X, 15, 14, 16X, F6.2, 6X, F8.1 /
C*** 00218000
C      ( 77X, F6.2, 6X, F8.1 )
C*** 00219000
C      00220000
C      00221000
C      00222000
C      00223000

```

```

112 FORMAT(1H0,1X, 4M PRESENTED AREAS AND TRUE COMPONENT VULNERABLE, 00224000
* 3M AREAS (SQUARE FEET) PER TIME INCREMENT / 00225000
* 35H0 + + + COMPONENT + + + PRESENTED, 39X, 00226000
* 15H1ME INCREMENTS / 00227000
* 32H INDEX NAME NUMBER AREA, 7X, 10F4.2) 00228000
113 FORMAT (1X,14,3X,A8,16,F13.5,4X,10F9.4) 00229000
121 FORMAT (1H1) 00230000
122 FORMAT (22H0+ + + COMPONENT + + + / 22H INDEX NAME NUMBER, 00231000
* 3(37H LOOK-ANG PRESENTED AREA WIDTH ) / 00232000
* 1X, 13, 3X, A8, 16, 1X, 00233000
* 3(5X, 32HINDEX (50. METERS) (METERS) ) / 00234000
* (19X, 3(112, 1X, 2F12.2) ) ) 00235000
123 FORMAT (1H1, 14X, 34H+ + + C O M P O N E N T P K , 00236000
* 45H U N C T I O N S F O R A S A L T * * * / 00237000
* 45X, 43H-DAMAGING ENERGY LEVELS IN MILICJULES/SD.CM. / 00238000
* 3X, 24H+ + + COMPONENT + + + , F7.2, 9F8.2 / 00239000
* 3X, 24HINDEX NAME NUMBER !, 79(1H-)) 00240000
124 FORMAT (1X, 15, 3X, A8, 16, 4H !, 10(F7.2,1X)) 00241000
125 FORMAT (45H ALL DONE + ADD THE AIM POINTS AND FAULT TREE) 00242000
126 FORMAT (23H UNEXPECTED EOF -- LINE, 13, 11H COMPONENTE, 13) 00243000
127 FORMAT (31H VA FILE DOES NOT MATCH -- LINE, 13) 00244000
END 00245000

```

```

C***
C SUBROUTINE ASPTJAC( AZ, EL, ILOOK )
C CONVERT FASTGEN LOOK AZIMUTH AND LOOK ELEVATION TO THE
C ASALT INDEX FOR THE SAME LOOK ANGLES.
C
C FASTGEN ASALT INDEX
C AZ EL AZ EL INDEX
C 180. -90. 0. 0. 1
C 180. -45. 0. 45. 2
C 225. -45. 45. 45. 3
C 270. -45. 90. 45. 4
C 315. -45. 135. 45. 5
C 0. -45. 180. 45. 6
C 45. -45. 225. 45. 7
C 90. -45. 270. 45. 8
C 135. -45. 315. 45. 9
C 180. 0. 0. 90. 10
C 225. 0. 45. 90. 11
C 270. 0. 90. 90. 12
C 315. 0. 135. 90. 13
C 0. 0. 180. 90. 14
C 45. 0. 225. 90. 15
C 90. 0. 270. 90. 16
C 135. 0. 315. 90. 17
C 180. 45. 0. 135. 18
C 225. 45. 45. 135. 19
C 270. 45. 90. 135. 20
C 315. 45. 135. 135. 21
C 0. 45. 180. 135. 22
C 45. 45. 225. 135. 23
C 135. 45. 270. 135. 24
C 180. 45. 315. 135. 25
C 180. 90. 0. 180. 26
C
C ILOOK = 0
C IF (ABS(EL-90.) .LE. 1.E-05) ILOOK = 26
C IF (ABS(EL+90.) .LE. 1.E-05) ILOOK = 1
C IF (ILOOK .GT. 0) RETURN
C
C WHICH ELEVATION?
C
C CHK = -45.
C DO 10 I = 0,2
C IF (ABS(EL-CHK) .LE. 1.E-05) GO TO 12
C CHK = CHK + 45.
C 10 CONTINUE
C GO TO 900
C
C WHICH AZIMUTH?
C
C 12 IAZ = 4
C IF (AZ .LT. 180.) GO TO 20
C IAZ = 0
C AZ = AZ - 180.
C 20 CHK = 0.0
C DO 30 J = 1,4

```

00302000  
 00303000  
 00304000  
 00305000  
 00306000  
 00307000  
 00308000  
 00309000  
 00310000  
 00311000  
 00312000  
 00313000  
 00314000  
 00315000  
 00316000  
 00317000  
 00318000  
 00319000

```

IF (ABS(AZ-CHK) .LE. 1.E-05) GO TO 32
CHK = CHK + 45.
30 CONTINUE
GO TO 900

C*** THE INDEX IS ***
C
C***
32 LOOK = I-8 + 1 + IAZ + J
RETURN

C*** ENOUGH
C
C***
900 WRITE (6,901) AZ, EL
901 FORMAT ('*** ERROR *** CANNOT CLASSIFY LOCANGLES AZ, EL',/
          '15X, 2F10.2)
      CALL EXIT
      STOP
      END
  
```

```

C***
C      SUBROUTINE FINDCOMP(IPT, ICOMP, IC, NCKIT)
C      DIMENSION ICOMP(100)
C      SEARCH FOR COMPONENT NUMBER, IC, IN ARRAY ICOMP WHICH CONTAINS
C      NCKIT COMPONENT NUMBERS. RETURN THE ARRAY POSITION IN IPT OF
C      THE VALUE 0 IF THE COMPONENT IS NOT THERE.
C***
      IPT = 0
      DO 100 I = 1, NCKIT
      IF (ICOMP(I) .EQ. IC) GO TO 110
      100 CONTINUE
      RETURN
      110 IPT = I
      RETURN
      END

```

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00320000
00321000
00322000
00323000
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00327000
00328000
00329000
00330000
00331000
00332000
00333000
00334000

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C*** SUBROUTINE GETXYZ(ICOMP, CUMP, NCRT, NAME)
C*** DIMENSION ICOMP(100), CUMP(3,100)
C*** CHARACTER*8 NAME(100)
C*** DIMENSION SM(2,170), JM(5,170), AZV(3), ELV(3)
C*** DIMENSION X(100), Y(100), Z(100)
C*** DIMENSION NX(100), NY(100), NZ(100)
C*** DATA AZV(0,0), 90.0, 90.0, ELV(0,0), 0.0, -90.0/
C*** DATA X/100*0.0/, Y/100*0.0/, Z/100*0.0/
C*** DATA NX/100*0/, NY/100*0/, NZ/100*0/
C*** READ THE FRONT, LEFT SIDE, AND BOTTOM LINE OF SIGHT SHOT LINE
C*** TARGET DESCRIPTIONS AND DETERMINE THE X, Y, AND Z COORDINATES
C*** OF EACH CRITICAL COMPONENT
C***
C*** ILOS = 1
C*** 10 READ (ILOS) AZ, EL
C*** IF (AZ.EQ. AZV(ILOS) .AND. EL.EQ. ELV(ILOS)) GO TO 20
C*** WRITE (6,11) ILOS, AZ, EL
C*** 11 FORMAT (1H0, '***ERROR*** INCORRECT LOS FILE FOR VIEW', 13,
C*** ' ' , AZ', 18.1, ' ' , EL', 18.1)
C*** CALL EXIT
C***
C*** 20 READ (ILOS, END=150) (DUM, (SM(1,J), I=1,2), (JM(1,J), I=1,5),
C*** ' ' , J = 1,170)
C*** DO 100 J = 1,170
C*** END OF VIEW?
C***
C*** IF (JM(2,J).EQ. 0) GO TO 150
C*** SY = SM(1,J)
C*** SZ = SM(2,J)
C*** IC = JM(2,J)
C*** CALL FINDCOMP(IPT, ICOMP, IC, NCRT)
C***
C*** IPT=0 FOR NONCRITICAL COMPONENTS (NOT IN ARRAY ICOMP)
C***
C*** IF (IPT.EQ. 0) GO TO 100
C***
C*** STORE SHOT LINE COORDINATES == DEPENDENT ON THE CURRENT VIEW
C***
C*** GO TO (50, 60, 70), ILOS
C***
C*** FRONT VIEW == COORDINATES ARE Y AND Z AIRCRAFT COORDINATES
C***
C*** 50 Y(IPT) = Y(IPT) + SY
C*** NY(1,1) = NY(IPT) + 1
C*** Z(IPT) = Z(IPT) + SZ
C*** NZ(IPT) = NZ(IPT) + 1
C*** GO TO 100
C***
C*** SIDE VIEW == COORDINATES ARE -X AND Z AIRCRAFT COORDINATES
C***
C*** 60 X(IPT) = X(IPT) - SY
C*** NX(IPT) = NX(IPT) + 1
C*** Z(IPT) = Z(IPT) + SZ

```



```

      NZ(IPT) = NZ(IPT) + 1
      GO TO 100
C***
C      BOTTOM VIEW -- COORDINATES ARE -X AND Y AIRCRAFT COORDINATES
C***
      70 X(IPT) = X(IPT) - SY
      NX(IPT) = NX(IPT) + 1
      Y(IPT) = Y(IPT) + SZ
      NY(IPT) = NY(IPT) + 1
      100 CONTINUE
      GO TO 20
C***
C      END OF VIEW
C***
      150 ILOS = ILOS + 1
      IF (ILOS .LE. 3) GO TO 10
C***
C      COMPUTE COMPONENT LOCATIONS IN THE ASALT AIRCRAFT COORDINATE
C      SYSTEM, USE THE AVERAGE OF THE SHOT LINE COORDINATES THAT
C      INTERSECTED THEM IN THESE THREE VIEWS
C      -- ALSO CONVERT COORDINATES FROM INCHES TO METERS --
C***
      WRITE (6,301) NCRIT
      DO 300 I = 1,NCRIT
      IF (NX(I) .NE. 0) COMP(1,1) = X(I) / FLOAT(NX(I)) * 0.0254
      IF (NY(I) .NE. 0) COMP(2,1) = Y(I) / FLOAT(NY(I)) * 0.0254
      IF (NZ(I) .NE. 0) COMP(3,1) = Z(I) / FLOAT(NZ(I)) * 0.0254
      290 WRITE (6,302) I,NAME(I),ICOMP(I),COMP(1,1),COMP(2,1),NY(1),
      *      COMP(3,1),NZ(I)
      300 CONTINUE
      301 FORMAT (1H1, 22X, 2H--, 13, 32H CRITICAL COMPONENT LOCATIONS == /
      *      23H0 + + + COMPONENT + + + /
      *      23H INDEX NAME NUMBER, 6X, 15HX=CCCRD, SAMPLE,
      *      6X, 15HX=COORD. SAMPLE, 6X, 15H2-COORD. SAMPLE )
      302 FORMAT (1X, 14, 3X, A6, 16, 1X, 3(F12.2, 17, 2X))
      RETURN
      END

```

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C*** SUBROUTINE NAMES(NAME, NCRIT, BLANK)
C    CHARACTER*6 NAME(100), BLANK
C    READ THE COMPONENT NAMES FROM LOGICAL UNIT 7 IF PROVIDED,
C    OTHERWISE INITIALIZE TO BLANKS
C***
      READ (7,120,END=100) (NAME(I), I=1,NCRIT)
      RETURN
100 DO 110 I = 1,NCRIT
      NAME(I) = BLANK
110 CONTINUE
120 RETURN
      FORMAT (A6)
      END

```

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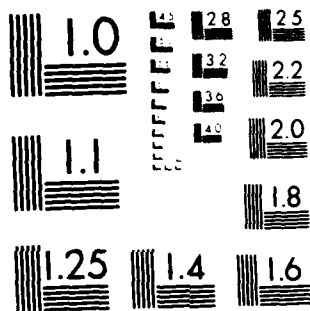
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